Nursing Home System Study

Broadened Investigation (Phase 2) Synthesis

September 29, 2020

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Study Overview

Nursing homes remain a central concern in the response to the COVID-19 crisis because of the intersection of multiple risk factors. The close living quarters, shared staff and services, and medical frailty of the residents result in a triple threat to the health of those in need of these facilities.

Low wages, long hours, and the physical nature of the work have always been part of the reality for nursing home staff, but COVID-19 has amplified the burden as they contend with a lack of family and volunteer support, changes to routines and protocols, increased emotional needs of the residents, the stress of potential exposure to the virus, and the resultant effect on their own personal lives outside of work. In spite of consistently heroic efforts by staff, the circumstances seem unsustainable.

Study Overview - *continued*

PHASE 1 SUMMARY The first phase of this study produced four core insights based on extensive research both in the field (i.e., long-term care facility visits) and through interviews with subject matter experts. The insights focused on the ever-evolving infection control recommendations and guidance, the reality and challenges around guidance implementation, staff burden and sacrifice, and the psychosocial consequences of COVID-19 on staff, residents, and family. The insights from the first phase frame the opportunity spaces focused on in subsequent phases.

PHASE 2 SUMMARY The second phase focused on further exploration of other types of long-term care facilities: Assisted Living and Independent Living – serving a variety of populations. Additional site observations occurred during the phase and those findings were synthesized in the existing body of work. We aimed to understand more broadly the similarities and differences among various congregate living facilities for aging populations. The combined work was used to develop new strategies and potential opportunities for care models and frameworks, and initial notional design concepts for space, protocols, workflow, staffing, use of technology, and other relevant ideas. These strategic opportunities will guide the third phase of work will launch with a collaborative work session involving stakeholders to design, develop, and implement potential solutions and responses.
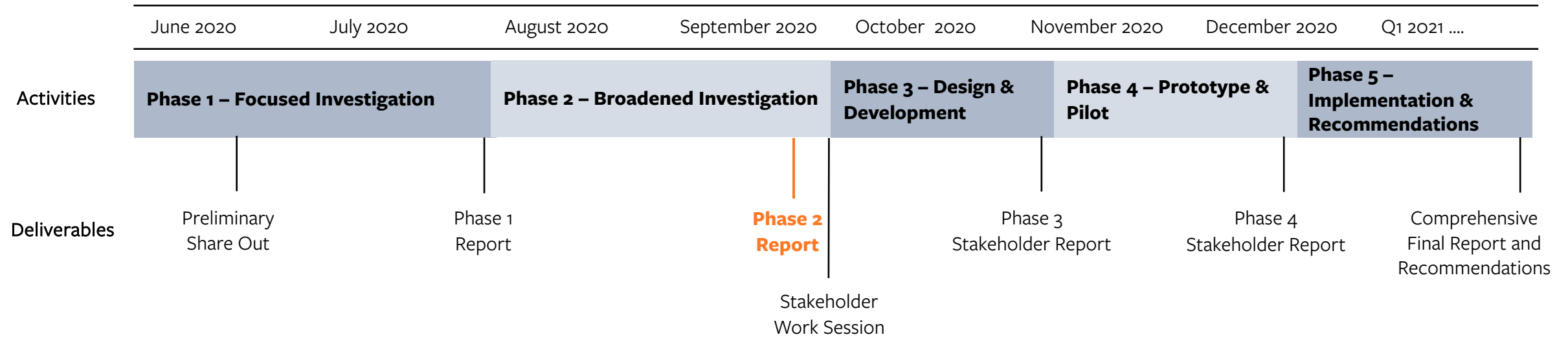
Study Objective

The Design Institute for Health will build on the immediate emergency COVID-19 response efforts of the City of Austin by analyzing, evaluating, and identifying approaches for broader-scale system improvements to protect residents and reduce the risks of the spread of COVID-19 in nursing homes, Assisted Living centers, and other long-term care facilities.

Phase 2 Objective

The objective of Phase 2 was to further explore key learnings from Phase 1 from a broader perspective in terms of other types of long-term care facilities, subject matter experts, and people within the system, in order to develop holistic, strategic opportunities for how might we improve current and future outbreak responses in long-term care.

Project Timeline

	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	Q1 2021 ….

Activities

Phase 1 – Focused Investigation	Phase 2 – Broadened Investigation	Phase 3 – Design & Development	Phase 4 – Prototype & Pilot	Phase 5 – Implementation & Recommendations

Deliverables

Preliminary Share Out

Phase 1 Report

Phase 2 Report

Phase 3 Stakeholder Report

Phase 4 Stakeholder Report

Comprehensive Final Report and Recommendations

Stakeholder Work Session

The full Statement of Work with phase descriptions can be found in the Appendix of this report.

Part 1

Team

Steering Committee

This is a collaborative partnership of numerous entities.

AUSTIN PUBLIC HEALTH, CITY OF AUSTIN

Anjum Hanafi, Long Term Care Incident Command Team

TEXAS HEALTH AND HUMAN SERVICES COMMISSION

Michelle Dionne-Vahalik, Associate Commissioner, Long Term Care Regulation

Michael Gayle, Deputy Associate Commissioner, Policy, Rules, and Training in Long-Term Care Regulatory

THE UNIVERSITY OF TEXAS AT AUSTIN

SCHOOL OF NURSING

Tracie Harrison, Director, Center for Excellence in Aging Services and Long Term Care

STEVE HICKS SCHOOL OF SOCIAL WORK

Sarah Swords, Clinical Associate Professor, Assistant Dean for Master's Programs

DELL MEDICAL SCHOOL

Stacey Chang, Executive Director, Design Institute for Health

Liam Fry, M.D., CMD, Chief of Division of Geriatrics and Palliative Care, Department of Internal Medicine

Core Team

DELL MEDICAL SCHOOL

Clay Johnston, M.D., Ph.D., Dean, Dell Medical School

Stacey Chang, Executive Director, Design Institute for Health

Liam Fry, M.D., CMD, Chief of Division of Geriatrics and Palliative Care, Department of Internal Medicine

Diana Siebenaler, Director of Partnerships & Network Strategy, Design Institute for Health

Jeff Steinberg, Director of Operations, Design Institute for Health

Stephanie Anderson, Senior Administrative Program Coordinator, Design Institute for Health

Stephanie Morgan, Design Researcher, Design Institute for Health

Rose Lewis, Social Service Designer and Design Researcher, Design Institute for Health

Natalie Campbell, Visual Designer and Design Researcher, Design Institute for Health

Arotin Hartounian, Systems Designer and Illustrator, Design Institute for Health

Matthew Love, Project Manager, Design Institute for Health

Aashnika Sujit, Student Intern, College of Natural Sciences

Ian Chiu, Student Intern, College of Natural Sciences

Part 2

Methodology

Methodology

Strategic opportunities were developed from insights and observations generated during Phase 1 and Phase 2. We utilized both secondary and primary research methodologies to understand what areas have the highest need for responses to COVID-19 and other similar infectious diseases.

We continued to gather and analyze information from secondary sources. We researched data about Assisted and Independent Living outbreaks in Texas, New York, and California; infection control protocols in the US and foreign countries; Texas nursing homes vs. Texas hospitals policy; aging models in various countries; and the media portrayal of nursing homes.

During Phase 2, we conducted 4 additional site visits, including 1 Independent Living unit, 4 Assisted Living units, and 2 Skilled Nursing facilities. We also expanded our research to two other populations: 1) veterans and veterans' family (spouses and Gold Star Parents) and 2) people with Intellectual or Developmental Disabilities (IDD). We established connections with city entities including the Housing Authority of Austin and Austin Parks and Recreation to better understand their response to COVID-19 and whether it could inform the development of the nursing home strategic opportunities. In total, 24 additional interviews were conducted during this broadened phase.

In order to incorporate family perspectives, we developed a survey that was distributed to facilities from Phase 1 and Phase 2 site visits. To date we have received 85 family member responses. We synthesized the data, which helped develop the strategic opportunities focused on resident family and wellbeing.

Phase 1 & 2 Facilities
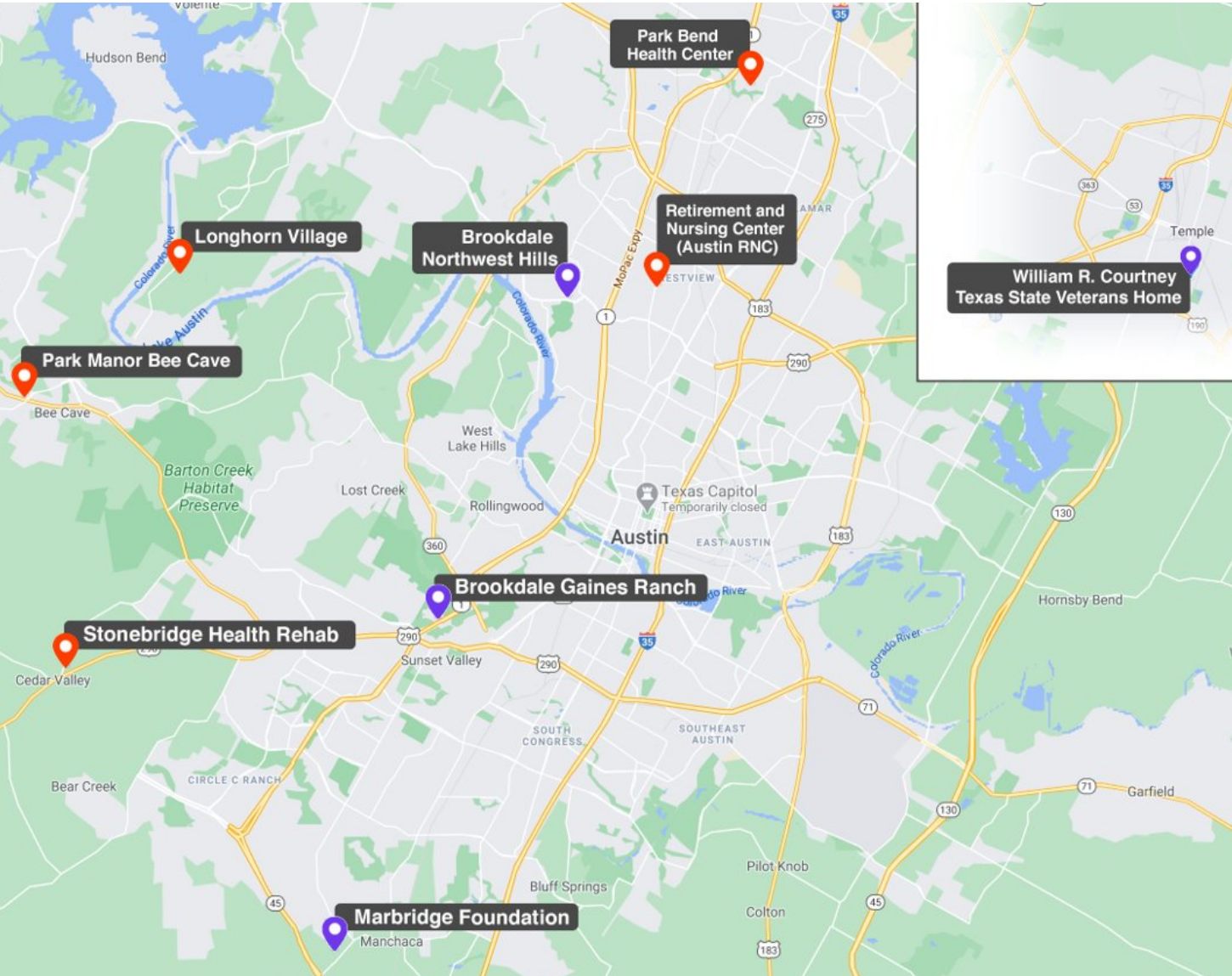
PHASE 1

Park Bend Health Center

Skilled Nursing (*SNF*)
Size: 39,635 SQFT, 1 story, built in 2000, Total beds: 124; Occupied beds: 95

Stonebridge Health Rehab

Skilled Nursing (*SNF*)
Size: 39,650 SQFT, 1 story, built in 1997, Total beds: 116; Occupied beds: 63

Retirement and Nursing Center (Austin RNC)

Skilled Nursing (*SNF*)
Size: 47,834 SQFT, 2 buildings, built in 1971, Total beds: 150; Occupied beds: 73

Park Manor Bee Cave

Skilled Nursing (*SNF*)
Size: 53,724 SQFT, 1 story, built in 2013, Total beds: 140; Occupied beds: 82

Longhorn Village

Continuing Care Retirement Community (*CCRC*)
Size: 68,000 SQFT, 2 story, built in 2009, Total beds: 60; Occupied beds: 34

PHASE 2

Brookdale Northwest Hills

Assisted Living (*AL*)
Size: 98,077 SQFT, 3 Stories, Built in 1999, Service Type: Type B, Total Beds: 240

Brookdale Gaines Ranch

Assisted Living (AL), Independent Living (IL) Size: 220,789 SQFT, 5 Stories, Built in 1999, Service Type: Type A, Total Beds: 58

William R. Courtney TSVH

Skilled Nursing (*SNF*)
Texas State Veterans Homes provide affordable, long-term care for Texas Veterans, their spouses, and Gold Star Parents. Total Beds: 160, Occupied Beds: 151

Marbridge Foundation
VILLAGE AT MARBRIDGE
Assisted Living (*AL*)
Type A Assisted Living serving IDD citizens. Total Beds 90
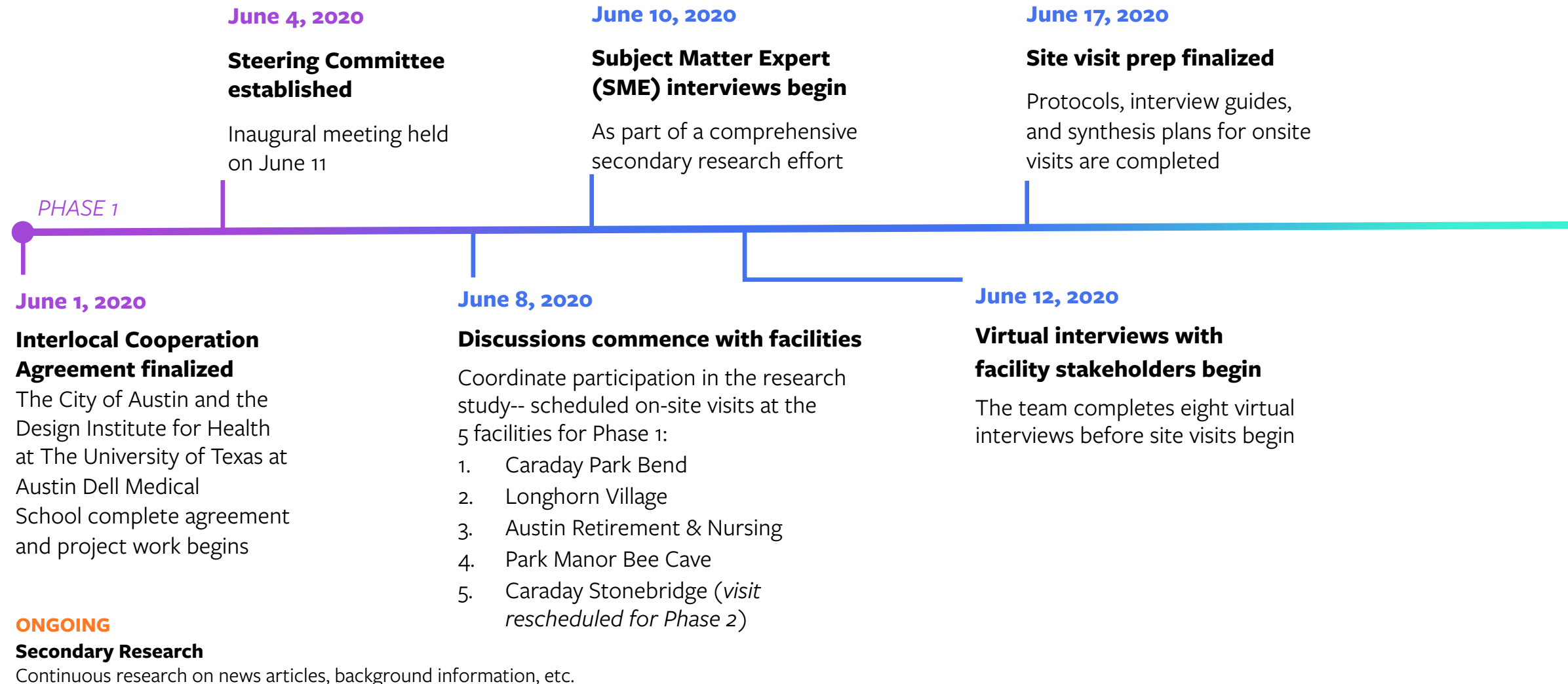
MARBRIDGE RANCH
Assisted Living (*AL*)
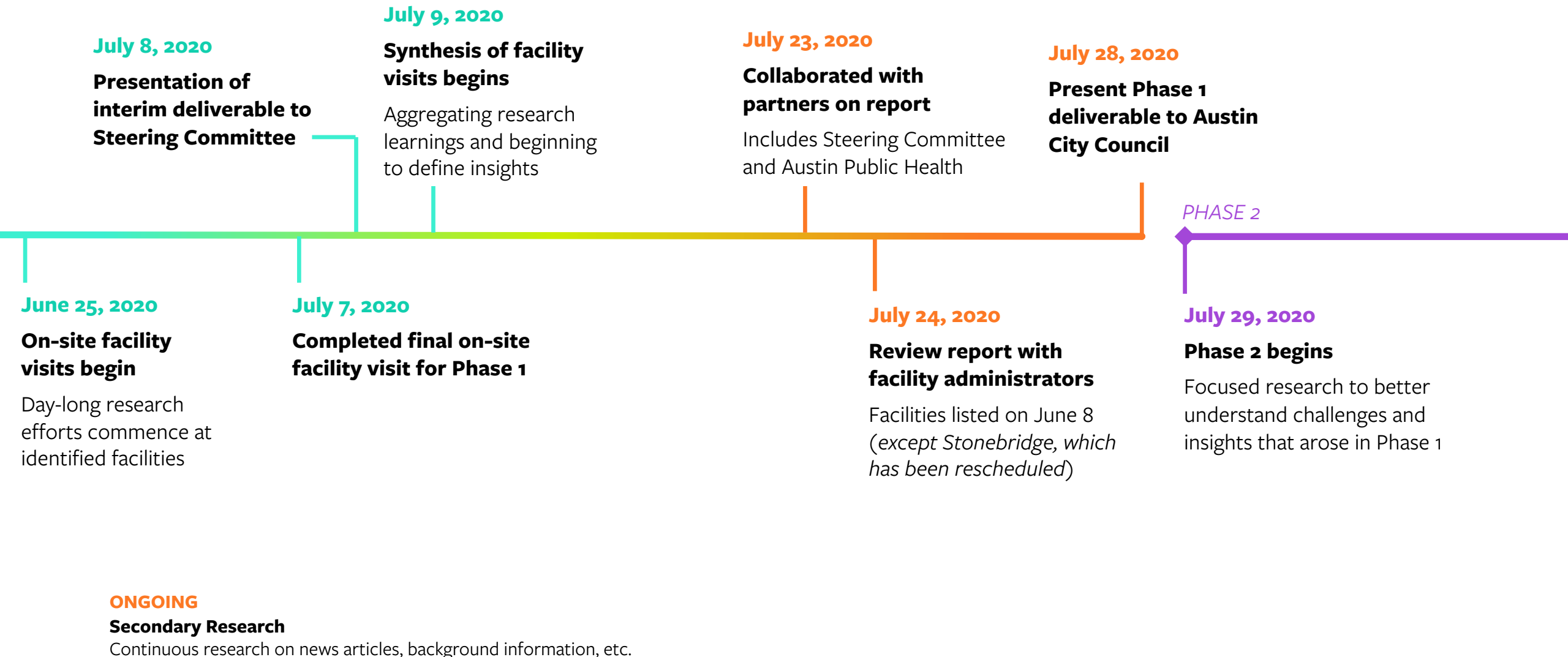Type A Assisted Living serving IDD citizens. Total Beds: 99

MARBRIDGE VILLA
Skilled Nursing (*SNF*)
Serving IDD citizens. Total Beds: 92

Timeline of Activities (Phase 1 of 5)

June 4, 2020

Steering Committee established

Inaugural meeting held on June 11

June 10, 2020

Subject Matter Expert (SME) interviews begin

As part of a comprehensive secondary research effort

June 17, 2020

Site visit prep finalized

Protocols, interview guides, and synthesis plans for onsite visits are completed

PHASE 1

June 1, 2020

Interlocal Cooperation Agreement finalized
The City of Austin and the Design Institute for Health at The University of Texas at Austin Dell Medical School complete agreement and project work begins

June 8, 2020

Discussions commence with facilities
Coordinate participation in the research study-- scheduled on-site visits at the 5 facilities for Phase 1:
1. Caraday Park Bend
2. Longhorn Village
3. Austin Retirement & Nursing
4. Park Manor Bee Cave
5. Caraday Stonebridge (*visit rescheduled for Phase 2*)

June 12, 2020

Virtual interviews with facility stakeholders begin

The team completes eight virtual interviews before site visits begin

ONGOING
Secondary Research
Continuous research on news articles, background information, etc.

Timeline of Activities (Phase 1 of 5)

July 9, 2020

Synthesis of facility visits begins

Aggregating research learnings and beginning to define insights

July 8, 2020

Presentation of interim deliverable to Steering Committee

July 23, 2020

Collaborated with partners on report

Includes Steering Committee and Austin Public Health

July 28, 2020

Present Phase 1 deliverable to Austin City Council

PHASE 2

June 25, 2020

On-site facility visits begin

Day-long research efforts commence at identified facilities

July 7, 2020

Completed final on-site facility visit for Phase 1

July 24, 2020

Review report with facility administrators

Facilities listed on June 8 (*except Stonebridge, which has been rescheduled*)

July 29, 2020

Phase 2 begins

Focused research to better understand challenges and insights that arose in Phase 1

ONGOING

Secondary Research

Continuous research on news articles, background information, etc.

Timeline of Activities (Phase 2 of 5)

Aug 14, 2020

Synthesis of facility visits begins

Aggregating the research from facility visits and subject-matter interviews and developing new emerging insights

Sept 10, 2020

Completed final on-site facility visit for Phase 2

Aug 12, 2020

On-site facility visits begin

Half-day research efforts commence at identified facilities

Aug 17, 2020

Opportunity development begins

Developing strategic opportunity areas for Phase 3 from research learnings

Sept 18, 2020

Opportunity development completed

ONGOING

Secondary Research

Continuous research on news articles, background information, etc.

Timeline of Activities (Phase 2 of 5)

Sept 22, 2020

Presentation of interim deliverable to Steering Committee

Sept 29, 2020

Present Phase 2 deliverable to Austin City Council

PHASE 3

Sept 30, 2020

Phase 3 begins

ONGOING

Secondary Research

Continuous research on news articles, background information, etc.

Part 3

Establishing Context

Types of Long-term Care Services

Spectrum of need and level of care

◯ = Focus of Phase 1 Research

△ = Focus of Phase 2 Research

Continuing Care Retirement Community (CCRC)
A long-term care option for older adults who want to stay in the same place through different phases of the aging process.[8]

Independent Living
Congregate living for older adults or people with disabilities. Residents are independent, but have access to assistance when desired. △

Assisted Living
Includes assistance with activities of daily living (ADLs) and medication management when necessary.[4] △

Skilled Nursing Facility (SNF)
- Short-term rehab
- Long-term care
(*commonly known as a* Nursing Home)
Nursing homes are the highest level of care someone will receive outside of a hospital[3], other than at-home care. Includes assistance with activities of daily living (ADLs) and a high level of medical care.[4] ◯△

◀ Low need/ Low level of care

High need / High level of care ▶

Context for Phase 1: Skilled Nursing Facilities

Why do nursing homes exist?

- Patient acuity in nursing homes today is similar to what you would find in hospital recovery a decade ago. Nursing homes are medical facilities, not retirement homes.

- An inability to perform the activities of daily living (ADLs) is the most common reason for residence in a nursing home.

- Most residents are in nursing homes because their loved ones were unable to meet the complexity of their needs at home.

Who resides within nursing homes?

- 55% of residents in Texas nursing homes have been medically diagnosed with dementia.

- In 30 years, the population in Texas over the age of 65 will triple. Those over 85 will quadruple by 2050.

Who regulates nursing homes?

- Nursing homes are highly regulated by Health and Human Services Commission in each state.

How are nursing homes funded?

- 80 – 85% of Texas nursing home residents depend on Medicare or Medicaid funding for their care.

- 86% of Texas nursing homes reported allowable costs that exceeded Medicaid reimbursement.

What staffing challenges do nursing homes experience?

- Staff workload (physically and mentally) is disproportionate to hourly wage. Certified Nurse Aide's average wage in Austin is $13/hr.

- Staff retention is a constant challenge for facilities and administrators.

- Competition for staff is fierce when the same skillsets are in demand elsewhere.

Context for Phase 2: Independent and Assisted Living Facilities

How are Assisted and Independent Living facilities regulated?

- Assisted Living facilities are regulated and licensed by Health and Human Services (HHS). There are two types: Type A and Type B. For a Type A facility, residents need to be able to evacuate under their own cognitive and physical ability in 13 minutes with minimal assistance. Type B Facility residents require assistance in an emergency. [1]

- Independent Living facilities are not regulated by HHS.

How do residents pay for Assisted and Independent Living?

- Assisted Living facilities are generally paid for privately. Some will accept long-term care insurance, veterans benefits and rarely Medicaid (Medicaid STAR+PLUS waivers are very limited, hard to qualify for and generally have a waiting list).[2]

- Independent Living facilities are paid for privately as well. Some will accept long-term care insurance.

Is medical care included?

- Assisted Living facilities have some clinical providers onsite (for limited hours) and on call but most are **not** staffed 24/7 with clinical providers as is the case in Skilled Nursing facilities. [3]

- Independent Living facilities do not provide medical care. They are focused on providing social connections and activities with residents who are 55+ and lowering the burden of maintenance that would be needed to reside in a stand-alone single-family home. If medical care is needed while living in these facilities, a third-party contractor would be hired.

> **Note:** Independent Living and Assisted Living facilities may be unattainable for those on limited incomes, as they are generally paid for via private funds. As such, Medicare and Medicaid may cover the costs of home health workers or personal care assistants who visit residents in their existing apartment/condo/home during a set schedule each week. These in-home services, while helpful, do not have the same level or oversight/accountability that an in-facility care team would have.

1. https://hhs.texas.gov/doing-business-hhs/provider-portals/long-term-care-providers/assisted-living-facilities-alf
2. https://www.elderoptionsoftexas.com/paying-for-texas-assisted-living.htm
3. https://www.seniorliving.org/compare/assisted-living-vs-skilled-nursing/

Austin Area Skilled Nursing Facilities & Assisted Living Facilities (currently)
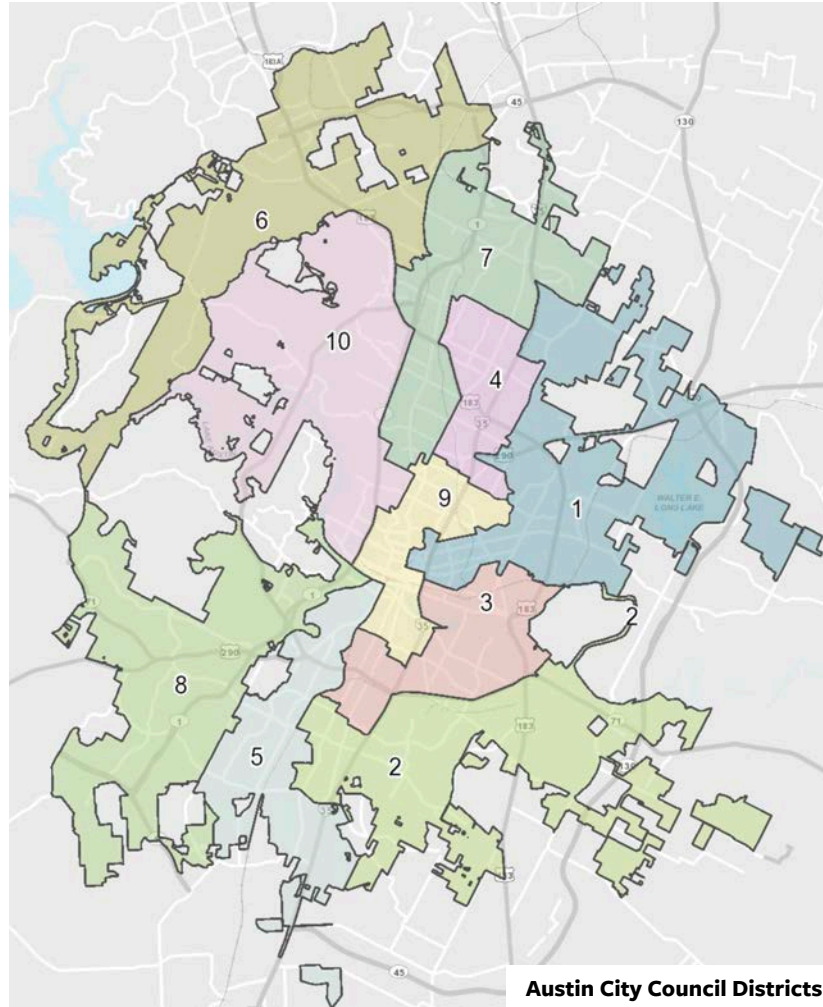
32
Skilled Nursing Facilities in Travis County

70
Assisted Living Facilities in Travis County

~90%
Of Austin's long-term care facilities are located west of I-35

Austin City Council Districts

Within Austin City Districts:

DISTRICT 1
4 Nursing Homes
3 Assisted Living

DISTRICT 2
None

DISTRICT 3
1 Nursing Home

DISTRICT 4
1 Nursing Home
3 Assisted Living

DISTRICT 5
4 Nursing Homes
8 Assisted Living

DISTRICT 6
3 Nursing Homes
6 Assisted Living

DISTRICT 7
4 Nursing Homes
9 Assisted Living

DISTRICT 8
2 Nursing Homes
8 Assisted Living

DISTRICT 9
1 Nursing Home
1 Assisted Living

DISTRICT 10
2 Nursing Home
7 Assisted Living

DISTRICTLESS
5 Nursing Home
14 Assisted Living

This list does not include Independent Living facilities as they are not regulated by HHSC.

Part 4

Expanded Insights

Phase 1 Insights – Skilled Nursing Facilities

Insight #1: **Theory vs. Reality in Nursing Homes**

Many COVID-19 infection control protocols are fundamentally misaligned with the realities of both living and working inside a nursing home. This results in significant effort to comply with recommendations that are logistically and operationally challenging, clinically misaligned, and at times behaviorally infeasible.

Insight #2: **Evolving Guidance and Recommendations**

Nursing homes receive conflicting or hard-to-interpret guidance for COVID-19 infection control – recommendations are communicated frequently, often from different sources, and lack clear, actionable directives for implementation, resulting in Directors of Nursing (DONs) and Facility Administrators absorbing the responsibility of clinically interpreting and operationally translating these evolving guidelines into action. Given the complexity and possible enforcement, DONs and Administrators are forced to deprioritize their other critical duties, as this sensemaking process necessitates tremendous time, collaboration, and decision-making.

Insight #3: **Staff Behaviors, Sacrifices, and Risks**

The novelty and unknown characteristics of this virus have presented a new challenge to nursing homes as significant risks for COVID-19 transmission do not solely exist within the facility but can be introduced through those who traverse external facility boundaries as well. While it is understood that staff choices in their personal lives, such as social distancing, are a key component of a facility's ability to control infection, facilities likewise acknowledge that they can neither monitor nor control staff behaviors off the clock.

Insight #4: **Psychosocial Consequences of COVID-19**

Resident isolation from family, friends, and other residents has resulted in a cascade of resident psychosocial consequences, such as depression and loneliness. With families currently unable to provide support to residents, staff choose to absorb this emotional burden themselves – a response that is not sustainable long-term. However, with no end in sight to visitation restrictions, the potential for resident decline and staff burnout in the near-term seems inevitable.

Phase 2 Expanded Insights – Independent and Assisted Living Facilities

INTRODUCTION
A majority of the key observations, findings, and insights we gleaned from our Phase 1 work were also present in the additional facilities we observed and interviewed during Phase 2. However, additional insights, specifically pertaining to variances noted in Assisted Living and Independent Living facilities did emerge, which are as follows:

Insight #5: **Aging-in-Place vs. Resident Safety**

Independent Living is primarily a lifestyle choice made by residents. Many seniors are drawn to the concept of living in a community with planned social activities and programming. In joint Assisted Living / Independent Living facilities and Continuing Care Retirement Communities (CCRC), residents appreciate the ability, when the times comes, to move into an Assisted Living or Skilled Nursing facility without losing the connection to their home and social network.

Generally speaking, Assisted Living and Skilled Nursing are both regulated by HHSC, while Independent Living is not regulated by any state/government agency. However, in crisis situations such as COVID-19, some operators/facilities of communities with varied facility types and resident acuity adopted and implemented more conservative guidance in the interest of protecting their more vulnerable residents. In some instances, this required Assisted Living and Independent Living residents (living in close proximity to higher acuity residents) to abide by more restrictions and to experience more significant constraints placed on their freedom and independence.

Insight #6: **The Price of Wellness**

Because Assisted Living and Independent Living facilities are primarily private pay, with some accepting long-term care insurance, select owners and operators of these facilities have less limitations with how they use their funds. In some instances, this translates to an ability to take a more holistic approach to care for residents that, for example, considers the six dimensions of wellbeing – physical, social, emotional, spiritual, intellectual, and occupational. In other instances, it means they have the gift of additional resources and space to respond to crises such as COVID-19 with more flexibility, adapting extra conference rooms for PPE storage. By contrast, Medicaid-funded Skilled Nursing facilities do not enjoy the same and tend to operate within tight financial and spatial constraints. While providing residents with this quality of care before and during a pandemic increases the potential for residents to live this chapter of their lives with fulfillment and purpose, the necessity for private pay prevents all aging populations from being able to equally access these living situations.

Phase 2 Expanded Insights – Independent and Assisted Living Facilities - *continued*

Insight #7: **Impact of Trust on Facility Culture & Staff Retention**

The correlation between communication, transparency, and trust in organizational cultures is widely understood. The presence and impact of these cultural elements was also felt in the Skilled Nursing, Assisted Living, and Independent Living facilities we observed. Facility leadership that was proactive and transparent about the nature of their COVID-19 planning, preparation and outbreak response were touted by staff as a key factor in their decision to continue working at those facilities.

Part 5

Resident Family & Friends Survey

Family Survey Overview

The families and caregivers of residents in long-term care facilities play a crucial role in the health and wellbeing of the residents. From our facility interviews, we learned that family, friends, and loved ones help fill gaps for resident care and quality of life (e.g., necessary social and emotional support, extra support at meal times, checking on missing laundry, etc.). Given the important role they play, we created a short, accessible five-question survey for family members and caregivers to share their stories, perspectives, and reaction to the COVID-19 response. We shared this with all the facilities we visited and asked them to distribute the survey through their family communication channels.

As guidance is ever-evolving, the family responses (and our initial questions) don't necessarily match current visitation policies. The changing nature of guidance will persist, so we will continue to incorporate family input throughout the subsequent phases.

85 Responses

5 Facilities took part in the survey

SURVEY QUESTIONS:

1. Tell us the story of how your resident came to live in this facility (e.g. location, resident preference, other options considered, physical/mental state, etc.)

2. Since March 2020 when changes due to COVID-19 started (i.e., restricted visiting), have you been in touch with your loved one?

3. How? (i.e., Facetime, Zoom calls, phone calls, window visits)

4. What has worked well for you? What hasn't worked? Why?

5. Overall, what have been your greatest concerns regarding your resident and/or the facility during COVID-19?

6. Anything else you would like to share? (Optional)

Survey Synthesis

Families provided important insight into their visitation experiences and their concerns with loved ones in facilities during COVID-19.
The survey results were an important component in developing the strategic opportunities. **Select key takeaways are captured below.**

1) Family members are worried that their loved ones are declining due to the isolation.

Family members consistently shared their concern over the psychosocial impacts of isolation for their resident.

"I respect that protecting the health of all residents and staff takes precedence, but having my mom locked away behind closed doors dying alone sucks.."

- Family Member

"Daddy getting sick and me not being there in person to hold his hand , talk to him and to hug him. He is getting depressed (understandable). Was told he wouldn't eat breakfast this morning. Which isn't like him."

- Family Member

2) There isn't a one-size fits all for visitation.

The survey responses showed varying experiences across the 4 types of communication/visitation between family and resident.

Visitation Experience For Families via Type of Communication

	POSITIVE EXPERIENCE	NEUTRAL EXPERIENCE	NEGATIVE EXPERIENCE
Phone	12	14	16
Facetime	14	7	11
Window Visit	10	15	15
Outdoor Visit	4	1	1
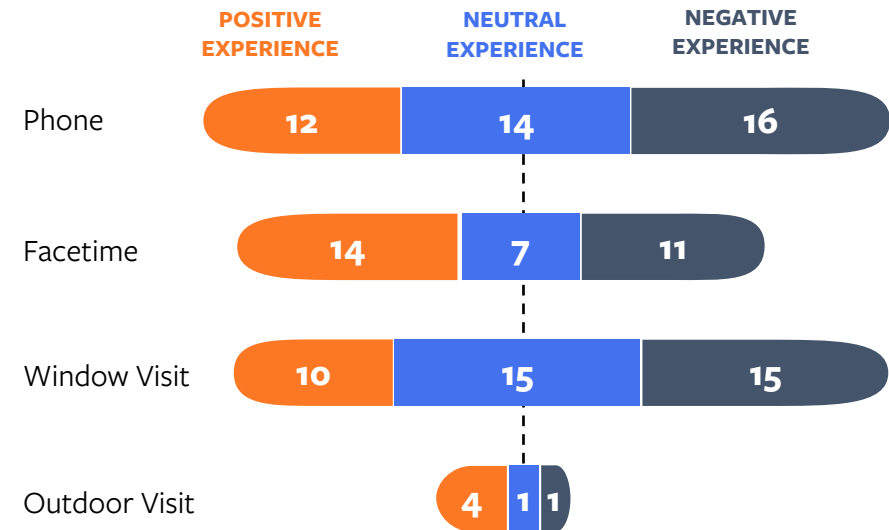
*Note that some families used multiple types of communication, so the numbers above do not match the number of respondents. Survey conducted from August 6, 2020 to September 16, 2020.

Survey Synthesis - *continued*

Regardless of the visitation challenges, isolation from their loved ones, and concerns over COVID-19, family members were overwhelmingly grateful for staff and their commitment to the residents' safety.

Here are a few highlights.

"I greatly admire the way that [facility administrator name] and the rest of the staff at [facility name] have handled the Covid crisis. They truly care about our family and have stayed in close touch with us since the beginning. I could not be more comfortable about my daughter's safety and welfare."

- Family Member

"ALL the staff (nursing, personnel, housekeeping, and others) deserve HUGE accolades for all the awesome love and care that they give to the residents at [facility name]!! I don't know how they do it! They all must have huge hearts of gold."

- Family Member

"[Facility name] has done a brilliant job...As a result they have been riding this pandemic rather than reacting to it. My resident is in the safest facility possible and my wife works in one of the safest facilities anywhere. I was very concerned for my resident as well as my wife back in March. But they were prepared and committed to doing this the right way and it shows."

- Family Member

"I think [facility name] is doing a very good job. It is tough to not see my wife in person, but I am glad of the good protective care she is given."

- Family Member

Part 6

Strategic Opportunities

What is a Strategic Opportunity?

Strategic Opportunities are the starting point for new ideas and solutions. They will be evaluated and explored by a team of experts in the upcoming phases to determine the feasibility, viability, and desirability of these concepts - with the goal of solving current or evolving problems in the long-term care field.

These concepts are informed by (and honor) the human-centered insights and qualitative design research conducted in both Phase 1 and 2. They represent the intersection of expressed and observed challenges, unmet needs, behaviors, tensions, and desires that warrant further exploration and analysis in subsequent phases of this work.

These opportunities may be quick and simple to implement, involve a series of incremental changes over time, and/or address and even question fundamental assumptions, established policies, and regulations. We organized these opportunities into categories named "Now, Near, Far", to represent the potential time, effort, and resources needed to make them come to life.

This list of opportunities is **neither prescriptive nor exhaustive**. These opportunities will help foster conversations with experts in the field in order to explore the possibility of implementation. Lastly, we recognize the need for further analysis of potential implementation barriers including, but not limited to, time, space, money, policy, culture, human resources, partnerships, etc.

The exploration and analysis in the future phases will be conducted from the following perspectives:

- **From a design perspective:** the potential to explore solutions from a variety of design disciplines
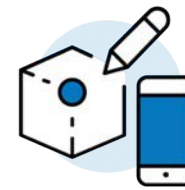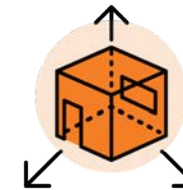
Product Design   Environments Design   Communication Design
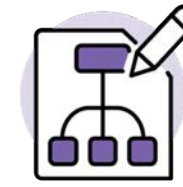
Service Design   Organization Design   Systems Design
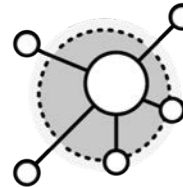
- **From a systems perspective**: the opportunity for various stakeholders/partners to collaborate towards a common goal: City of Austin, Austin Public Health, Health and Human Services (HHSC), Long-term Care Facilities (Staff, Residents, Family), etc.

What Strategic Opportunities did we identify?

In this body of work, the specific Strategic Opportunities our team identified are as follows:

1 Infection Control – COVID-19 and Beyond

2 Staff Wellbeing

3 Expansion & Evolution of Staff Roles

4 Staff Retention and Incentives

5 Resident Wellbeing

Overview of Strategic Opportunities

Evolving guidance for COVID-19 protocols will continue to impact our strategic opportunity areas

Strategic Opportunity matrix	1. Infection Control – COVID-19 and Beyond	2. Staff Wellbeing	3. Expansion & Evolution of Staff Roles	4. Staff Retention and Incentives	5. Resident Wellbeing
NOW	• Accommodating Different Learning Models • Building Depth in Knowledge • Cultural Self-Accountability • Reducing Physical and Cognitive Load • Accommodating Staff Basic Needs	• Preventing Staff Burnout	• Qualifying Non-Essential Staff	• Building Staff Morale	• Prioritizing Resident Dignity • Resident Engagement with Peers • Improving Communication Capabilities • Sustainable and Adaptable Visitation
NEAR	• Interpreting Infection Control Guidance • Differentiated Infection Control Guidance • Optimizing Existing Space • Improving Staff Experience in PPE	• Prioritizing Staff Mental Health	• Expanding Staff Capability	• Improving Remuneration • Building Staff Camaraderie • Developing Cultural Leadership	• Re-establishing Visitation • Leveraging Community Assistance • Communication Technology Solutions • Coordinated Outbreak Isolation
FAR	• Contained Networks Across the System • Flexible Space Considerations • Equitable Access to Resources • Proactive Future Planning	• Supportive Staff Spaces • Community Partnership to Support Staff	• Addressing Staffing Gaps • Advancing Staff Training	• Redefining Career Value	• Improving Family Placement Knowledge

What do Strategic Opportunities consist of?

Each Strategic Opportunity consists of the following components:

Introduction: A brief overview of vital context that frames the core problem space the Strategic Opportunity seeks to mitigate and the problem's significance

Relevant Insights: A capture of key Phase 1 and Phase 2 research insights leveraged in the generation of the Strategic Opportunity

Opportunity Category 1
Infection Control – COVID-19 and Beyond

INTRODUCTION

People play a vital role in infection control; every decision or behavior is capable of either greatly helping or harming any given situation. However, generally speaking, people experiencing high stress for extended periods of time, such as staff inside nursing homes caring for residents during a pandemic, do not always make the best decisions, nor are their memories as accurate, increasing the potential for critical gaps and errors with infection control in an unprecedented situation such as COVID-19. Moreover, strict but necessary PPE requirements, coupled with staffing shortages, are straining staff ability to meet their own basic needs during shifts, such as eating, drinking, and using the bathroom, creating additional barriers to staff wellbeing and their overall ability to perform at their potential.

In order to foster more person-centered infection control in training, spaces, and PPE, how might we...

RELEVANT INSIGHTS

- Insight 1: Theory vs. Reality in Nursing Homes
- Insight 2: Evolving Guidance and Recommendations
- Insight 5: Aging in Place vs. Resident Safety
- Insight 6: The Cost of Wellness

SUB-CATEGORIES

- Opportunities for Training
- Opportunities for Space
- Opportunities for Human Needs in PPE

2020 Design Institute for Health

What do Strategic Opportunities consist of?

Each Strategic Opportunity consists of the following components:

How Might We Statements: statements to facilitate idea brainstorming which include framing a problem, as well as a point-of-view to direct ideation; they are broad enough to foster a breadth of ideas, yet focused enough to help contain the thought exercise

Consideration Statements: potential ideas in response to the *How Might We statement* that will serve as the seeds for collaborative brainstorming sessions and conversations with our partners in Phase 3. In Phase 2, consideration statements are not intended to be exhaustive or vetted as interventions to pursue

What do Strategic Opportunities consist of?

Each Strategic Opportunity consists of the following components:

NOW   **NEAR**   **FAR**

1. Infection Control – COVID-19 and Beyond

NOW

Training

How might we leverage existing best practices for education, comprehension, and retention of information – visual, auditory, and kinesthetic – in order to better meet diverse learning needs and preferences?

1. Consider best practices for lesson structuring when creating training, such that information is appropriately repeated and reinforced (e.g. "I Do, We Do, You Do.").

2. Consider incorporating hands-on and other forms of experiential or participatory learning such that staff can effectively learn by doing.

"We did a demonstration on infection control about how things transmit from one surface to another and how easily you can get it on your shirt and then forget about it and infect yourself. So we did it with glitter. And you know, if you've ever played with glitter, glitter, doesn't ever go away. The dining room was sparkling for like a month."

- Director of Nursing

2020 Design Institute for Health   37

Now, Near, Far Categorization:
Each Strategic Opportunity has the potential for positive change to occur now, as well as in the near and far term.

- **Now:** simpler, "low-hanging fruit" that an individual nursing home facility or small team within another entity (e.g. Austin Public Health, Health and Human Services Commission, Facility Operators, etc.) could implement themselves

- **Near:** changes that require strategies and collaborative planning to implement, and likely require some degree of financial and/or policy analysis

- **Far:** changes that require significant strategy, analysis, collaborative planning, and partnerships to implement, and likely require considerable financial and/or policy analysis

Images and Quotes: visualizations and stories from the research that support the communication and/or importance of an idea

Opportunity Category 1
Infection Control – COVID-19 and Beyond

INTRODUCTION

People play a vital role in infection control; every decision or behavior is capable of either greatly helping or harming any given situation. However, generally speaking, people experiencing high stress for extended periods of time, such as staff inside nursing homes caring for residents during a pandemic, do not always make the best decisions, nor are their memories as accurate, increasing the potential for critical gaps and errors with infection control in an unprecedented situation such as COVID-19. Moreover, strict but necessary PPE requirements, coupled with staffing shortages, are straining staff ability to meet their own basic needs during shifts, such as eating, drinking, and using the bathroom, creating additional barriers to staff wellbeing and their overall ability to perform at their potential.

In order to foster more person-centered infection control in training, spaces, and PPE, how might we...

RELEVANT INSIGHTS

- Insight 1: Theory vs. Reality in Nursing Homes
- Insight 2: Evolving Guidance and Recommendations
- Insight 5: Aging in Place vs. Resident Safety
- Insight 6: The Price of Wellness

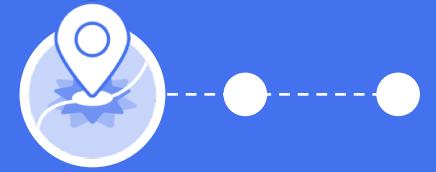## SUB-CATEGORIES

Opportunities for Training

Opportunities for Space

Opportunities for Human Needs in PPE

Training   **Accommodating Different Learning Models**

How might we leverage existing best practices for education, comprehension, and retention of information – visual, auditory, and kinesthetic – in order to better meet diverse learning needs and preferences?
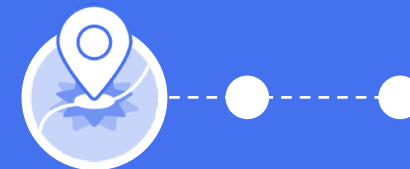
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2. Consider incorporating hands-on and other forms of experiential or participatory learning such that staff can effectively learn by doing.

"We did a demonstration on infection control about how things transmit from one surface to another and how easily you can get it on your shirt and then forget about it and infect yourself. So we did it with glitter. And you know, if you've ever played with glitter, glitter, doesn't ever go away. The dining room was sparkling for like a month."

- Director of Nursing

Training **Building Depth in Knowledge**

How might we foster a deeper understanding of "the why" behind infection control protocols such that staff are empowered through knowledge to take proper, safe, effective action?

1. Consider creating training materials in languages other than English to facilitate staff comprehension and comfort with the subject matter.

2. Consider on-demand options for training materials such that staff can educate and re-educate themselves on an as needed basis, on their own time, and/or when they have the capacity for retention.

3. Consider methods such as video recording in select facility spaces as a means to observe, review, and discuss opportunities for improvement through concrete, personal examples in familiar context.

4. Consider ways to get collective staff buy-in around training initiatives by ensuring their discipline/department is represented in the planning and development (e.g. create a training and education committee).

"I would have really liked for them to do a whole webinar in Spanish or something that we can save so they can hear it and visually see it than just to hand them 35 pages of a handout all in Spanish."
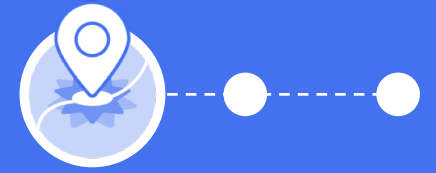
- Director of Nursing

"Who can tell the correct steps to put on this gown?"

A Director of Nursing facilitates impromptu PPE training with staff around a nurse's station.

Training   **Cultural Self-Accountability**

How might we foster positive organizational cultures around infection control such that staff are empowered to support and hold one another accountable for their behavior, as opposed to operating in fear?

1. Consider designating and clearly identifying a set of individuals per shift who can field and/or escalate questions as needed such that staff always have access to getting both help and answers.

2. Consider reiterating the importance and value of asking questions to foster a culture of transparent communication and support through subtle changes in language ("Any questions?" Vs. "What questions do you have? What have I missed?").

3. Consider scheduling team "drills" or "dress rehearsals" for what to do when there is a COVID-19 positive case to facilitate training and identify areas for improvement in a low-stress setting.

4. Consider positively reinforcing when staff disclose making mistakes to encourage a culture where failure can be a tool for learning.

"Drills reduce the fear."

- Director of Nursing

"We rehearse everything before we'd need to do it live. Staff are educated and ready. If you don't practice how will you know what to do? We can have a COVID positive patient isolated in 7 minutes."

- Facility Administrator

Training **Interpreting Infection Control Guidance**

How might we alleviate facilities' burden of accessing and interpreting infection control guidance to focus their attention and energy in a more beneficial way?

1. Consider publishing infection control guidance and updates as flow charts or decision trees (static or interactive) to reduce the cognitive burden of frequently needing to understand, interpret, and make decisions.

2. Consider creating a single platform (e.g. website, Google doc) per facility where updates, training materials, and other pertinent communications are archived, paired with easy, direct links to a point of contact who can answer questions in their specific domain(s).

3. Consider a centralized cloud-based system (an existing solution or a customized development) for guidance, two-way communication, and data collection for local and state-level needs.
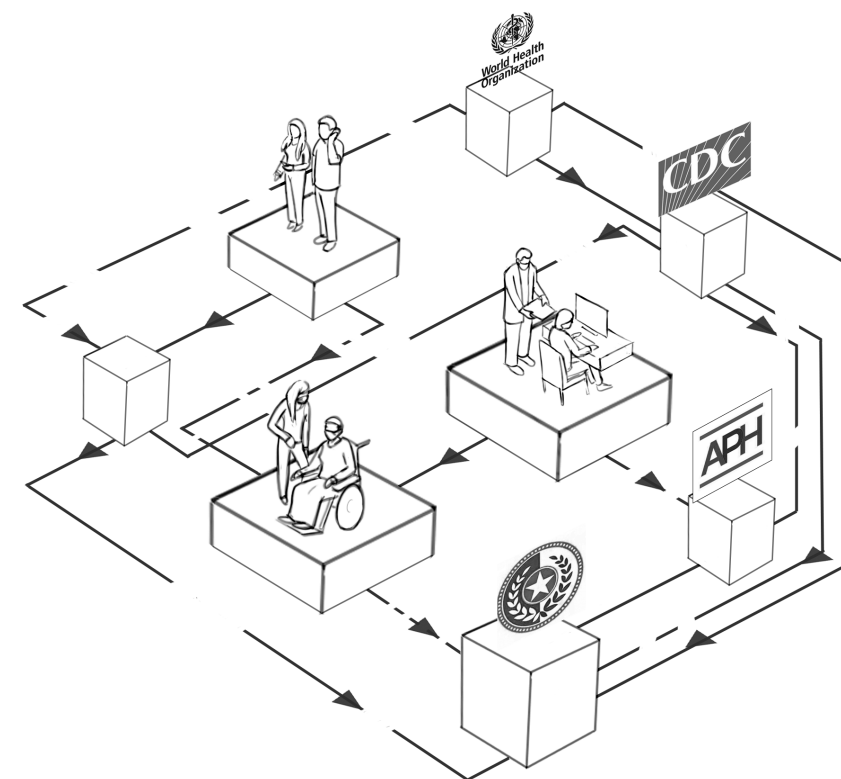
Training   **Differentiated Infection Control Guidance**

How might we facilitate the creation of infection control guidance bespoke to critical facility variances, such as layout, space utilization, and free space, in order to provide facilities with clearer direction and necessary details for efficient operationalization and implementation?

1.   Consider creating segmentations for common facility types – for example by facility layout, double occupancy vs. private rooms, etc. – to help those creating and publishing guidance have a snapshot to reference and remind them of differences they might need to consider.
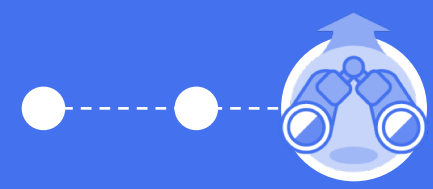
Training   **Contained Networks Across the System**

How might we establish networks / contracts of trust across care facilities in the system (i.e. nursing home and a specific hospital or specialty clinic) such that infection control concerns can be effectively prioritized or deprioritized?

1. Consider developing a network of facilities that serve a similar patient population - a facility take on "quarantine pods" - where all facilities agree to share information and have similar policies and procedures in place regarding infection control.

"We help each other across facilities. I go to Amarillo if they are having trouble running drills. Our director of housekeeping has been to almost every site because she is an expert in infection control and cleaning protocols. "
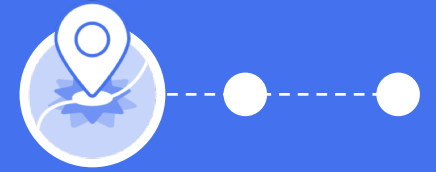
- Facility Administrator

"We have weekly calls to share info with our partner health systems nearby."

- Facility Administrator

Nursing Home 1   Nursing Home 2

Hospital 1   Hospital 2
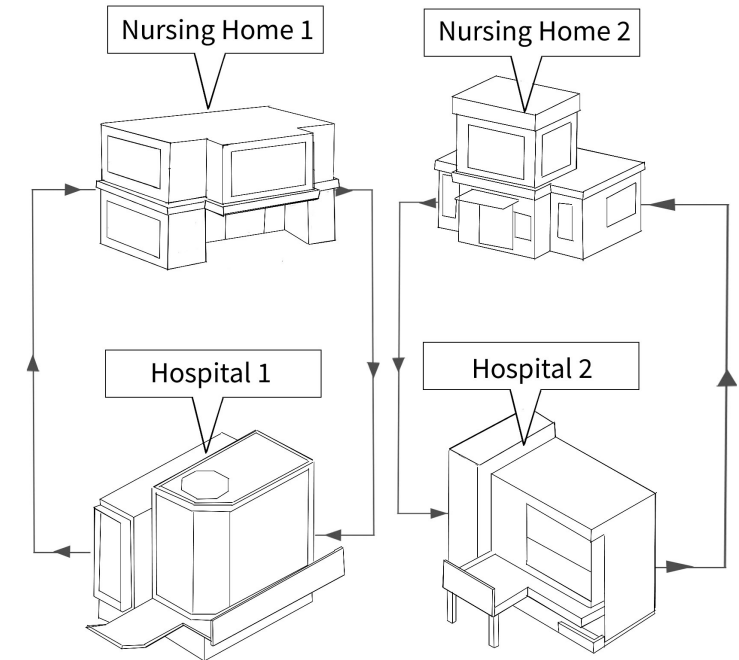
Two "quarantine pods" shows networked facilities serving a similar patient population.

Space **Reducing Physical and Cognitive Load**

How might we strengthen habit formation around key infection control measures by reducing the physical and cognitive effort of the task?

1. Consider placement of hand sanitizer at all high-touch or entryways to spaces that may have multiple people present (e.g. staff breakroom, clocking in/out, etc.).

2. Consider design and placement of key informational flyers and reminders to capture staff attention at critical points for infection control in their workflow.

3. Consider setting up COVID-19 positive unit rooms with newly replaced lights, controls, batteries, etc. To minimize low-priority needs for entering a room if there is an active case.

4. Consider incorporating tactile cues or embodied actions, such as zipping, to signify entry and egress to donning and doffing zones through other sensory modalities to foster comprehension and recall of infection control protocols.

"In between visits [family visitation], we've got to sanitize this room and sterilize it. We want this to be as touchless as possible...We want it to be human error less. So, we're taking the human error element out. Many of the facilities get into trouble with infection control when you leave it up to a human being, and we're only as good as we're trained or as good as we've rested the night before."
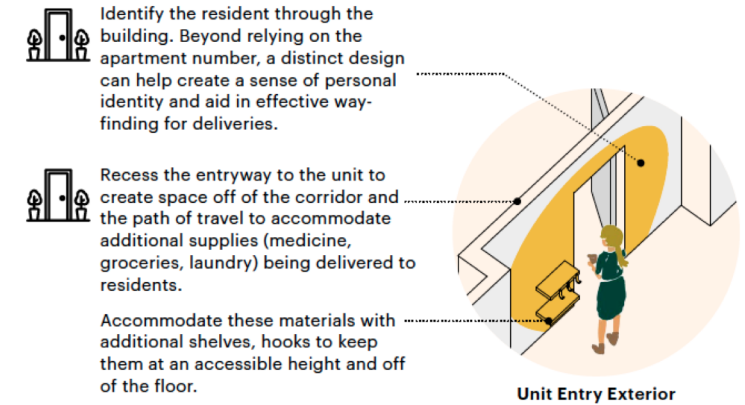
- Nursing Home Design Consultant

⬡ Space   **Optimizing Existing Space**

How might we adapt or optimize current nursing home facility spaces through minimal physical environment modifications to better serve current infection control needs of the facility?

1. Consider adapting existing underutilized spaces to create areas for donning and doffing that have limited or minimal distractions to promote learning, compliance, and recall of infection control protocols .

2. Consider adapting existing underutilized spaces (e.g. conference room) due to COVID-19 for PPE storage.

3. Consider adding portable/ modular structures (e.g. modified shipping container) to create separate staging spaces for needs such as deliveries needing to sit for 24 hours before being deemed "safe".

Identify the resident through the building. Beyond relying on the apartment number, a distinct design can help create a sense of personal identity and aid in effective way-finding for deliveries.

Recess the entryway to the unit to create space off of the corridor and the path of travel to accommodate additional supplies (medicine, groceries, laundry) being delivered to residents.

Accommodate these materials with additional shelves, hooks to keep them at an accessible height and off of the floor.

Unit Entry Exterior

Source: *https://massdesigngroup.org/covidresponse*

MASS Design Group has created a report with several suggestions for senior housing design considerations in the era of COVID-19.
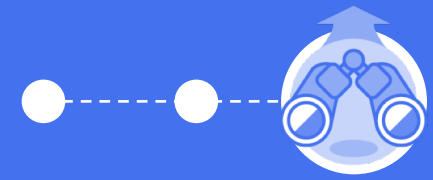
Space **Flexible Space Considerations**

How might we facilitate infection control preparedness bespoke to facility variances, such as layout, space utilization, and free space, in order to allow for more flexible spatial implementation of protocols?

1. Consider designing facilities with easy view corridors to resident rooms for ease of monitoring multiple rooms at once (a circular design seems to work well with a centralized area for group activities).

2. Consider designing Director or Assistant Director of Nursing offices with transparent windows in order to provide visibility of nurse stations and resident hallways.

3. Consider creating transition zones that could be left open or closed between major critical spaces, such as dining and resident rooms; entry; and community spaces.

4. Consider ceiling height, materiality, fire safety and HVAC design to allow for potential future space segmentation in larger rooms or in hallways.

"They [Regulators and Texas Special Infection Control Assessment teams] don't know life safety. None of those people are life safety people. So they have no clue, and I'm not a life safety expert, but to me… if life safety walked in and you couldn't go through that barrier [for isolation unit], they're going to be like, 'What are you people doing?'"

- Facility Administrator
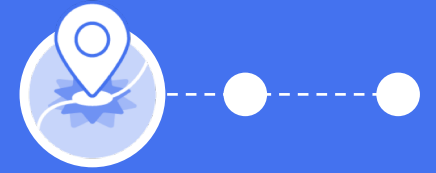
Human Needs in PPE   **Accommodating Staff Basic Needs**

How might we accommodate staff basic needs, such as using the bathroom, eating, and drinking, during their shifts while still complying with necessary infection control protocols?

1. Consider incorporating social distancing tactile and visual cues in staff specific spaces (e.g. breakroom) to eliminate the cognitive load of compliance during activities such as lunch.

2. Consider generating protocols for how and when to cover staff members so they can take breaks for their physical and mental wellbeing and sustainability.

"So make sure they're taking their breaks, make sure you're allowing them to have off the clock, that 30 minutes is important. I'm always after people, "Did you take your break?" Even if they go sit in their car, let their mind out of all this. Drink plenty of water, eat. It happens to me too."

- Director of Nursing

Staff members eat lunch in a facility breakroom with clear visual cues to denote social distance boundaries.

Human Needs in PPE   **Improving Staff Experience in PPE**

How might we evolve the materiality, wearability, and functionality of PPE to improve staff comfort and experiences while wearing it for extended periods of time on COVID-19 isolation units?

1. Consider examining advances in hydration pack and apparatus designs to explore additional avenues for ensuring adequate staff hydration.

2. Consider exploring temperature regulation technologies and features of analogous suit designs such as theme park characters, mascots, astronaut suits, etc.

3. Consider exploring behaviors and workarounds of analogous occupations that require significant bodily coverage, such as scrubbed-in surgeons and firefighters, to glean insight into how to make staff PPE experiences more manageable.

"And when you're working in these conditions, it's stressful. It's hot. I can tell you when I was out playing housekeeper, just moving beds around and making beds and everything else, you're sweating and you've got this mask on your face."

*– Facility Administrator*
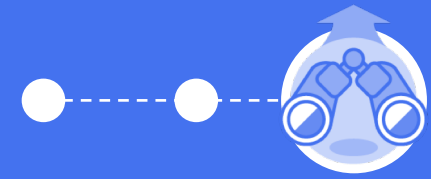
Human Needs in PPE   **Equitable Access to Resources**

How might we ensure timely, adequate access to resources critical for infection control (e.g. PPE) during times of crisis?

1. Consider a regional stockpile to expedite the distribution of PPE as opposed to relying on federal supply chains, as well as mitigate storage challenges many facilities face.

"So once those cases happened there [in Houston], I said, "Oh my gosh, it's going to be here and we need to start ordering PPE." The next week COVID-19 was in Austin and I checked our supplier and they said, "It's on back order". So I got on Amazon and I ordered so much with my personal money. I ordered so many masks and PPE from Amazon because I knew that was going to happen. And sure enough, that's how we survived from my Amazon mask order because it came. "

- Director of Nursing
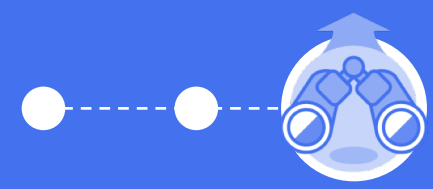
Human Needs in PPE   **Proactive Future Planning**

How might we be proactive in our infection control measures and preparations despite the uncertainty of what the future holds for future pandemics and disease outbreaks?

1. Consider forming an evidence-based system for generating, reviewing, and revising infection control protocols during a crisis that includes representatives with on-the-ground experience to ensure staff time, energy, focus, etc. toward infection control are optimally directed.

2. Consider generating protocols that include when to commence actions such as proactive symptom monitoring of staff, residents, and visitors for flu and other illness.

3. Consider designing for negative pressure retrofits that could be built as needed, as well as separate HVAC air handling for different zones that could be isolated should a disease pathogen become airborne.

4. Consider planning and designing for extreme scenarios to ensure a degree of preparedness in future unforeseeable circumstances (I.e. everyone is an asymptomatic carrier; patient care and facility navigation needs to be entirely touchless; virus has high R_o/is very contagious).

Opportunity Category 2
Staff Wellbeing

INTRODUCTION

Nursing home staff are dealing with unprecedented levels of stress and trauma in their work environment. Staff are living in constant fear of contracting COVID-19 and/or transmitting COVID-19 to vulnerable residents or other staff members in the facilities. Staff members are experiencing loss both in their personal and work lives, and many staff members are quarantined away from family and friends. This could result in potentially damaging, long-term consequences in this workforce. A field already struggling with retention, now may see higher levels of burnout and staff leaving the field and never coming back.
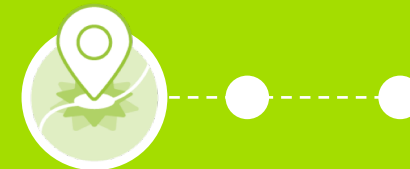
In order to prioritize staff wellbeing and ensure staff have the necessary resources to avoid burnout, how might we...

RELEVANT INSIGHTS

- Insight 1: Theory vs. Reality in Nursing Homes

- Insight 2: Evolving Guidance and Recommendations

- Insight 3: Staff Behaviors, Sacrifices, and Risks

- Insight 4: Psychosocial Consequences of COVID-19

- Insight 7: Impact of Trust on Facility Culture and Staff Retention

Preventing Staff Burnout

How might we address staff burnout by implementing support systems both within facilities and across the field in order to prioritize staff wellbeing, especially during and after crises like COVID-19?

1. Consider long-term care staff support groups and/or process groups led by a social worker or professional facilitator. Explore low-investment and low-fidelity options, such as email, phone/computer application, or virtual meet-ups.

2. Consider ways to support staff in their personal lives (i.e., childcare options, short-term loans, food pantry staples at discounted rate, meal delivery).

3. Consider coordinating and facilitating in-services focused on self-care and mental health first aid.

4. Consider collaborative partnerships with nearby hotels, restaurants, etc. where staff could be housed temporarily and get local meals delivered.

5. Consider avenues and forums to foster collaboration across facilities and reduce staff burden in order to facilitate idea generation and/or resource sharing for different roles (i.e., Facebook groups for Activity Coordinators to share ideas for activities while abiding by COVID-19 infection control protocols).

"I've had friends who don't work in the industry who ask about my work, and I say, "You wouldn't get it. I can't talk to you about it. You wouldn't get it."...Why is it I can talk to people who have been through it, and I won't talk to people who aren't in it?"

– Facility Social Worker

A support group for long-term care staff led by a professional facilitator, such as a licensed social worker.

2. Staff Wellbeing

Prioritizing Staff Mental Health

How might we prioritize mental health support and resources for facility staff in order to reduce burnout?

1. Consider creating a work culture around support, self-care, and mental health awareness. Encourage and potentially incentivize corporate backing for programming.

2. Consider partnering with local therapy private practices and subsidizing counseling/therapy sessions for staff (dependent on existing benefits) as a way of encouraging this service for staff members.

3. Consider implementing an Employee Assistance Programs or a similar program/initiative to increase accessibility for mental health resources.

4. Consider encouraging staff to take mental health days as needed and framing them as "wellness days" to combat the potential associated stigma.

5. Consider subsidizing exercise classes or mindfulness meditation and providing opportunities to engage in these services during staff break times.

"Walking the halls is different. I see their [residents that died] rooms and I know who used to live there. That sucks."

*– Facility Social Worker on the trauma from losing residents to COVID-19*
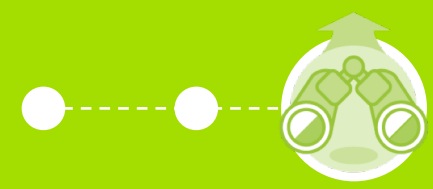
Supportive Staff Spaces

How might we reconceive staff experience through physical space in order to prioritize staff wellbeing during each shift?

1. Consider future building designs to prioritize staff breakrooms and outdoor staff-dedicated spaces. Staff breakrooms tend to be the first thing shrunk when value engineering buildings. Therefore, they end up centrally located, tight, and without any windows. There is potential to create meaningful outdoor spaces for staff, such as an outdoor covered seating area, so staff can have socially-distanced lunches together.

2. Consider reviewing evidence-based design principles for ways that access to nature can support staff wellbeing.

3. Consider opportunities for smaller staff respite spaces within each unit such that there is a convenient space to take a personal call or sit down for a few minutes whilst maintaining physical proximity to their residents.
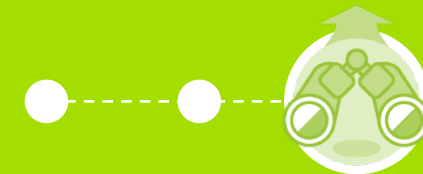
Community Partnership to Support Staff

How might we create a system to facilitate community partnerships in order to connect nursing homes to altruistic companies looking to support staff wellbeing?

1. Consider creating a platform/established structure to connect Austin-based organizations, such as Whole Foods or Amazon, with nursing homes interested in an opt-in sponsorship. This could help nursing home staff access groceries and necessities and organizations achieve local social impact initiatives. An analogous example: Texas Sponsor A Highway.

Opportunity Category 3
Expansion & Evolution of Staff Roles

INTRODUCTION

Due to the ever-changing nature of guidelines for infection control and overall response to COVID-19, nursing home staff are experiencing both new and different workloads and needing to continuously adapt to their changing roles, tasks, and environments. As a result, who is doing what, why, and when currently in nursing homes ranges from staff taking on responsibilities outside their scope of work, thereby distracting them from their other necessary duties, to staff not being fully utilized, to staff completely stepping in to fill a gap created by recent staffing shortages. While challenges with long-term care staffing existed well before the pandemic, circumstances due to COVID-19 have both acutely reinforced their significance and exacerbated their impact.
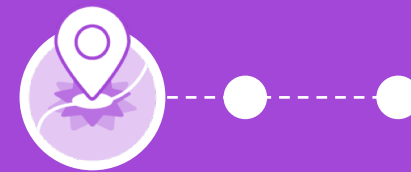
In order to reinvigorate and sustain our society's vital long-term care workforce, how might we...

RELEVANT INSIGHTS

- Insight 2: Evolving Guidance and Recommendations

- Insight 4: Psychosocial Consequences of COVID-19

Qualifying Non-Essential Staff

How might we redefine and expedite the qualification of non-essential staff as essential staff in order to create a labor pool capable of supporting resident wellbeing needs?

1. Consider qualifying volunteers as essential staff in order to create a minimal to no cost staffing solution who are willing and capable of supporting residents with their psychosocial needs.

2. Consider generating and regularly updating facility-specific crisis response onboarding materials (i.e. "Fast Facts") that includes key information such as points of contact, notable resident needs, floorplan, facility culture, etc. To expedite immersive training of new staff and other supporting personnel.

"Do you know how many people are at home right now that just want to get out and want to volunteer?...we've gotten letters like galore from pen pals. Well, most of my residents can't write and my staff, unfortunately, don't have the time to sit there and help them write a letter back, but a volunteer would do that. Can you imagine if I had a volunteer, that's all they did all day?"

– Facility Executive Director

A volunteer from the community helps a resident write a letter to a pen pal.

Expanding Staff Capability

How might we leverage subtle modifications to current staffing in order to maximize potential staffing resources?

1. Consider staffing licensed Master's level social workers as this degree and licensure allows them to supervise social work intern(s) for up to 40 hours per week, thereby creating an increased staffing resource in a necessary and diverse expertise.

2. Consider staffing licensed Master's level social workers as this degree and licensure allows them to supervise master's level student interns who can conduct clinical services such as group therapy – a needed, but underutilized service for both nursing home residents, and staff.

3. Consider cross-training staff in other disciplines (i.e. food services and nursing aide or cosmetology and activities coordination) so staff are not only able to fill service gaps in crisis situations, but also develop multiple skill sets and additional career paths.

"[Social work internships] give students an opportunity to engage with the residents, and they have more free time to do those types of things that she [SNF social worker] doesn't necessarily always get to, to just sit and chat with Mr. Smith and look at pictures, for example. We have utilized that quite a bit in our Skilled Nursing."

– Independent Living Social Worker

A licensed master's level social worker supervises graduate-level social work students as they provide additional clinical interventions to residents.

Addressing Staffing Gaps

How might we proactively prepare for potential staffing gaps for future pandemics and/or outbreaks?

1. Consider ways to identify and proactively train analogous work forces (e.g. search and rescue volunteers, health professional retirees, medical/nursing students, volunteer firefighters, etc.) to create an additional local labor pool ready for crisis response.

2. Consider increasing various staff to resident ratios to proactively balance and prioritize sustainable workloads for staff to allow for more flexibility during a crisis.

3. Consider developing and sharing a staffing model for crisis management for any future pandemics as a way to prepare for extreme situations (i.e. less than 12-hour notice that twenty staff members are unable to work).

"One thing they never tell you about COVID buildings... After someone has COVID we [social worker and three other staff members] had to go in there, pack all their belongings, wearing full PPE. Everything went to an offsite storage unit. And then you come back, and you have to deep clean all the rooms. So guess who was deep cleaning rooms? Guess who was packing up rooms? Guess who was coordinating with family members to come pick up belongings of people who had passed away from COVID?"

– Facility Social Worker

Advancing Staff Training

How might we advance and iterate the curriculum and training of nursing home staff in the education system such that it prepares them for the evolved needs of nursing home resident today, and beyond?

1. Consider education and training requirements for on-the-job exposure and experience through avenues such as residencies and apprenticeships.

2. Consider exploring the pros and cons of requiring a range of clinical exposure, experience, or training with facility leadership (e.g., degrees vs. informal training).

"And with administrators within the state of Texas, you don't have to have any clinical preparation at all. It's only been in the past 10 years to [require] a college degree."

– Facility Administrator

Opportunity Category 4
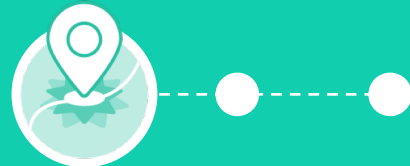# Staff Retention and Incentives

INTRODUCTION

Prior to COVID-19, long-term care facilities struggled with staff retention and turnover. With the additional burdens and stress that COVID-19 has brought to the facilities, complete staff rolls are a consistent challenge for facility administrators. The fear of contracting COVID-19 or positive cases on-site drove staff away at all levels. Additionally, for low-wage workers, staff could make more per week on unemployment benefits or at the local Buc-cee's or HEB. Not only is staff turnover detrimental to culture, morale, and resident care, but it is also operationally and administratively expensive. There should be further research into the cost of staff turnover and the reasons why staff leave this field. Recruitment and training require staff time and funding. With higher retention, this effort could be shifted elsewhere.

In order to improve staff retention to better meet resident and facility needs today, and be better prepared for potential future crises, how might we...

RELEVANT INSIGHTS

- Insight 2: Evolving Guidance and Recommendations

- Insight 4: Psychosocial Consequences of COVID-19

- Insight 7: Impact of Trust on Facility Culture and Staff Retention

Building Staff Morale

How might we reimagine staff appreciation and recognition under current budget constraints in order to improve staff retention through meeting psychological and emotional needs?

1. Consider implementing forms of psychic income, a form of income other than monetary, (i.e., providing opportunities for leadership and power, recognizing staff to external audiences) to emphasize staff recognition and appreciation.

2. Consider asking staff how they like to receive feedback and recognition: public or private, written or announced, gift or verbal.

3. Consider changing public perception about long-term care facility staff workloads and experiences during COVID-19 through media outlets.

4. Consider additional vacation days as a gesture of appreciation.

"I just wish people can see what we really do and get what we deserve out of it. I'm not expecting, "Oh, here's money," or, "Here's this." Just a thank you or, "I see what you're doing, and I appreciate it."

- *Certified Nurse Aide*

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Our Nursing Home Heroes

The State of Texas has in the past several months taken a concentrate effort in improving the conditions for care staff, facility management the patients who with family support over the course of the that recognize the sacrifices that a

A newspaper article highlights nursing home staff as heroes - changing the narrative for the typical media portrayal of nursing homes in the context of COVID-19.

Improving Remuneration

How might we improve staff retention through innovative solutions such that long-term care becomes a lucrative career for healthcare workers?

Job Option 1
Hospital
$17/ hr.

Job Option 2
Nursing Home
$17/ hr.

1. Consider increasing staff pay to compete with other healthcare employers and ensure a living wage.

2. Consider restructuring perks for staff so that they are incentivized to stay, even with a low wage. A good analogous example is Starbucks. During a shift, staff are given all the food and drinks they want. Staff are also given a pound of coffee per week.

3. Consider reimbursement plans or scholarships for continuing education opportunities to improve competency in a certain role or work towards a higher licensure or credential.

4. Consider alternative career advancement paths in-facility for staff so they can see a positive trajectory (e.g., Certified Nurse Aide to Director of Nursing; Certified Nurse Aide to Facility Administrator) in collaboration with diverse educational entities.

"CNAs, Med Aids, they chase a quarter because that really is a big deal to them... They wouldn't chase the quarter so much, if they felt that they were of more worth."

– Director of Nursing
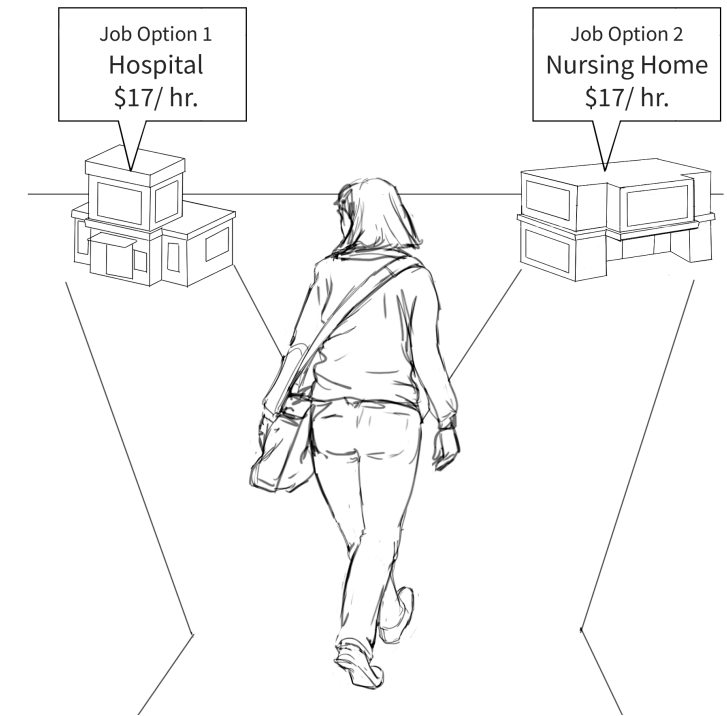
A potential nursing home staff member decides between a hospital and a nursing home with competitive wages.

Building Staff Camaraderie

How might we incentivize staff to strengthen the long-term care workforce such that they are working with people they like and are more likely to stay?

1. Consider a referral system for staff in order to incentivize staff members to bring friends, family, and/or peers onto staff.

"That's always been a strategy of ours is to if hey, go tell your friends, that's usually how you build a good team anyway is have a bunch of people that want to be around each other. So we figured that person-to-person referrals are a really valuable source for us. So we do pay a referral bonus if someone comes in."

- Facility Leadership

4. Staff Retention and Incentives

NEAR

Developing Cultural Leadership

How might we better understand best practices in successful, high-retention workplace cultures, including leadership characteristics, in order to create shareable learnings for other facilities?

1. Consider further research around high-retention facilities to better understand best practices and integral leadership characteristics that can then be shared with other facilities.

2. Consider leadership cultivation programs and initiatives to develop a workforce of strong, competent leaders for long-term care facilities.

3. Consider further research around the incorporation of program evaluation processes and feedback loops into leadership training in order to improve implementation and sustainability of facility initiatives.
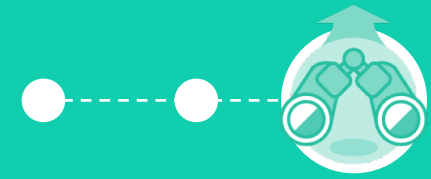
Redefining Career Value

How might we reframe and redefine the value proposition for working in long-term care in order to motivate healthcare workers to pursue a career in long-term care and stay in the field?

1. Consider creating more interest around a career and specialty in long-term care during educational programs in order to attract hourly staff and higher-level providers.

2. Consider a shift in resident clinical care such that it's not repetitive or stagnant, including models that reinforce team-based approaches rather than individually-owned tasks .

3. Consider creating retirement and time-off benefit programs for hourly workers. This could be coordinated by Health and Human Services or another entity. For example, a Certified Nurse Aide (CNA) could opt-in for a matched contribution.

4. Consider offering tenure-driven benefits, such as vesting, longevity pay, or the option to live as resident at the facility someday at a subsidized cost, to incentivize employee retention.

Opportunity Category 5
Resident Wellbeing

INTRODUCTION

Residents' wellbeing, quality of life, and psychosocial needs are at odds with current COVID-19 infection control protocols. While these protocols are designed to keep residents safe, in some cases, the isolation from family and friends is more detrimental than the disease itself. Additionally, as the routines and patterns of normalcy have drastically changed, or even halted, and residents are feeling the brunt of this shift – losing services and experiences that bring them dignity, socialization, connection, physical touch, and embrace. While we didn't interview residents specifically in this phase (see page 12), the staff and family reports of resident depression and decline due to isolation (e.g., social distancing protocols, family visitation limitations, etc.) have been staggering, although most family members understand, if not wholeheartedly support, the current COVID-19 precautions and limitations.
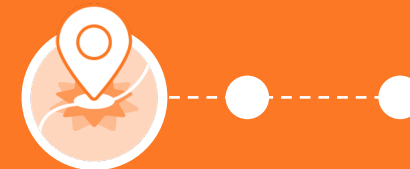
In order to more effectively balance COVID-19 infection control compliance with the needs of residents and prioritize their overall quality of life, how might we...

RELEVANT INSIGHTS

- Insight 4: Psychosocial Consequences of COVID-19

- Insight 5: Aging in Place vs. Resident Safety

- Insight 6: The Price of Wellness

Prioritizing Resident Dignity

How might we prioritize the residents' feeling of dignity such that essential services can be expanded to meet these needs?

1. Consider opening-up the beauty salons in the facilities and making these employees essential workers under the current regulations.

2. Consider increasing resident access to podiatrists and other practitioners for preventative or aesthetic care.

3. Consider ways to demonstrate a culture that emphasizes this is the residents' home and the needs of those that reside here matter.

"The residents need their haircut. I mean, it's essential…salons have opened-up in town, so there has to be lessons learned from some of the salons and what they're doing… And it's such a simple thing that does so much for human dignity."
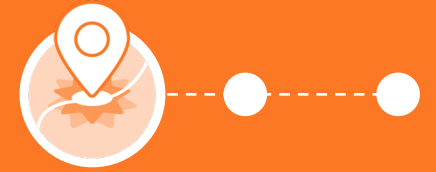
- Assisted Living Facility Leadership

A resident receives a haircut in the facility beauty salon.

Resident Engagement with Peers

How might we balance engagement between residents with appropriate infection control protocols in order to prioritize quality of life and socialization in facilities?

1. Consider coordinating Facetime dates with neighbors to help create community while residents are quarantined to rooms.

2. Consider workarounds for resident activities to maintain normalcy and routines. A few examples: 1) play the same movie in every room, so residents feel like they are all watching the same movie together, 2) divide resident activities by hallway and facilitate group activities in small pods (socially distanced with individual materials).

3. Consider fun ways to engage residents in safety protocols such as hats that have built in face shield.

"The only concern we have is the isolation of our parents from us and from each other and the effect on their mental well-being."
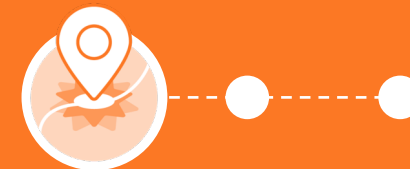
- Family Member

"I think my biggest concern is that the isolation causes loneliness and depression. And that he will pass before a cure can return things to some semblance of normalcy."

- Family Member

Improving Communication Capabilities

How might we establish communication tools and procedures in order to increase transparency for families, alleviate staff burden, and improve resident isolation?

1. Consider creating templates for facility email blasts to family members (e.g., Mail Chimp) and maintain a consistent schedule to send out these updates (e.g., weekly or bi-weekly).

2. Consider enlisting volunteers to staff call centers to provide an opportunity for resident social connection.

3. Consider establishing a concierge-style communi-cation style to reduce time-intensity/quantity of calling, while also increasing quality of communication and interaction for family members. This could include pictures of residents to to ease family members' concerns.

"Without being able to go in the facility and speak to other residents that still have their mind I can't really tell what is going on inside. I only hear what they want me to know."
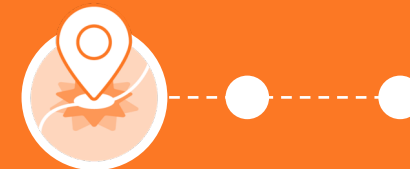
- Family Member

"I know most patients in long-term care facilities have much longer life expectancies than my mom, but it would be awesome and reassuring if the facilities would establish regular schedules to brief families, share photos, etc. just to give us a look inside on a predictable basis."

- Family Member

5. Resident Wellbeing

Sustainable and Adaptable Visitation

How might we mitigate the risk of an outbreak under current visitation guidance in order to sustain family visitation (i.e., essential caregiver visits, indoor plexiglass visits, outdoor visits, vehicle parades) for resident wellbeing?

1. Consider coordinating regional testing for family members assigned/appointed as essential caregivers.

2. Consider recruiting "essential volunteers" to help reduce staff burden during family visitation (i.e., escorting family members to visitation area, supervising visits to ensure mask compliance, coordinating appointments and scheduling, sanitizing visitation areas between visits).

3. Consider partnering with a PPE supplier/provider to ensure all essential caregivers have a surgical mask (at minimum).

4. Consider developing streamlined training and education materials (i.e., handouts, videos) for

family members/essential caregivers. What are best practices? How can they keep their loved ones and their family members at home safe?

5. Consider creating templates for varying staff and resident ratios to help staff determine appropriate and equitable visitation schedules.

6. Consider generating visually appealing and clear signage for facilities to help visitors with wayfinding and compliance with infection control protocols.

7. Consider strategic placement of hand sanitizer or hand washing stations to provide convenient access to sanitation stations for visitors.

"It is unfortunate but most of the changes recently implemented are creating an additional financial [and staffing] burden on the organizations. I am worried that buildings will have outbreaks trying to implement these changes too quickly and not being safe in their approaches."

- Director of Nursing

Re-establishing Visitation

How might we design a visitation area that can be used for future pandemics or immunocompromised visitors such that the experience respects resident privacy, incorporates the element of touch, and is a sustainable, long-term resource?

1. Consider creating a permanent space that can be used for visitation for any future outbreaks/pandemic and/or immunocompromised visitors beyond COVID-19.

2. Consider implementing readily available touchless inexpensive audio solutions to improve visitation experience for both family members and residents. Also, potentially eliminating the need for a staff member to "supervise" the visit.

3. Consider further research around visitation with touch. Reference analogous examples, such as neonatal visitation units and South Korean's phone booth testing sites.

"I've missed giving you hugs, grandma"

A woman visits her grandmother in a futuristic visitation booth - allowing for embrace and physical contact.

Leveraging Community Assistance

How might we leverage and engage community networks and organizations to provide resources and connection to residents such that a sense of normalcy is brought back to the facilities in a COVID-safe way?

1. Consider redesigning community spaces for residents to safely enjoy group activities with appropriate social distancing and smaller groups.

2. Consider utilizing outdoor spaces to bring local entertainers on site for resident events. Use the same staffing screening protocol for risk mitigation.

3. Consider coordinating with Austin Parks and Recreation to allow nursing home residents to visit local parks to get outside.

Communication Technology Solutions

How might we implement accessible and appropriately designed technology and/or systems to meet the communication needs of family members and residents in order to improve transparency and communication channels?

1. Consider implementing a transparent, patient portal for family members to stay up-to-date with real-time resident documentation in the facility.

2. Consider improving accessibility to phones with family members' faces to eliminate barriers: remembering phone numbers, relying on staff phones, and creating familiarity through pictures.

3. Consider utilizing civil monetary penalties money to provide these phones to all nursing home residents that request one.

"Residents have a variety of diagnoses that can cause issues with reliable communications: poor executive decision making, cognitive issues, eyesight, hearing, depression, anxiety. Majority unable to utilize modern technology."

- Facility Executive Director

"We have desk phones, but you really don't want to be taking someone to the front to have a conversation. And when their family member is outside the window, that doesn't work. And maybe this is not kosher. A lot of us, might as well say me, I'm using my own phone because it's the easiest thing to do to just say, "Oh, your son is here. I have his number." hit it, put it on speaker phone, let them have their visit, and I just come back in about 10 minutes and pick my phone up."

- Facility Social Worker

Coordinated Outbreak Isolation

How might we redesign nursing home facilities in order to create pods or villages for coordinated isolation during a future outbreak or pandemic?

1. Consider sectioning off the building into "pods" or "villages" to eliminate complete isolation. This allows a handful of residents to be grouped together, instead of confined to their room, and could potentially help prevent negative psychosocial consequences.

2. Consider designating space for staff to live in the pods with the residents. This could eliminate staff interactions outside of the facility and dramatically reduce risk for transmission from external sources.

"Small adjacent clusters can form a happy medium between complete isolation and complete exposure to the rest of the building. Small groups of neighbors (8-10 units) can not only be a peer support group, they can also share common amenities without relying on higher risk multi-purpose rooms or shared dining spaces."

- MASS Design group

Improving Family Placement Knowledge

How might we educate family members about long-term care such that family members are making educated decisions about placement prior to a family member in a time of crisis?

1. Consider creating a user-friendly, easy-to-digest senior living 101 guide that can effectively communicate the different types of facilities, types of care, payment models, etc. to ensure families can determine the best place for their resident.

"I experience it on a weekly basis with families who come to us and they're just deer in the headlights. They don't understand. They've all-of-a-sudden been hit with mom or dad can't go home anymore. It's like bringing home that child. There's no real training book on any of this. And if you have a book on this, who has time to read it and find out the 12 points that are the most important to know."

– Facility Executive Director

Part 6

Next Steps – Phase 3 and beyond

A MOMENT OF REFLECTION

We started this work with the intent to contribute to
the collective goal of reducing morbidity/mortality
in long-term care facilities due to COVID-19 by leveraging
our design expertise to identify and ultimately pilot
various tools and strategies that will support, enable, and
empower facilities – their staff, residents, and resident
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Simply put, in many ways, COVID-19 did the unthinkable – it halted U.S. society in March 2020, and has since forced us to pause, step back, and reflect on exactly where we are and how we got here. As we approach the start of the 87th Texas Legislature, the time to present big ideas, ask hard questions, and together find the best way forward is now.

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In the context of this work, this means examining the long-term care system in greater Travis County (and beyond) and asking, for example:

- **When, if ever, should we prioritize a person's quality of life over infection control, and allow them to live the last 1-2 years of their life as optimally and humanely as possible?**

- **Societally, people are living longer with more chronic conditions and less money – what practical, affordable long-term care options exist for the aging populations of today and their needs as modern medicine will work to keep them alive?**

- **What behaviors and practices are we incentivizing in the long-term care system, and do they result with the realities and needs of facilities, staff, and residents?**

- **How are all people and entities in the long-term care system communicating with one another, and are there opportunities to resolve breakdowns and augment coordination and collaboration?**

- **How do we rethink how American society treats our aging population and encourage integrated, multi-generational community approach to facilities?**

Where do we take the Strategic Opportunities from here?

	June 2020	July 2020	August 2020	September 2020	October 2020	November 2020	December 2020	Q1 2021 ….

Activities	Phase 1 – Focused Investigation	Phase 2 – Broadened Investigation	Phase 3 – Design & Development	Phase 4 – Prototype & Pilot	Phase 5 – Implementation & Recommendations

This is the start of three subsequent phases of work which will include:

- Collaborative brainstorm sessions and discussion with those who could play a part in bringing ideas to fruition, as well as those whom these opportunities seek to impact
- Putting ideas into action, iterating when and how we can
- Capturing and sharing key learnings for all to leverage

Gratitude

Our team is grateful for the City's commitment to the cross-functional collaboration on this initiative. The knowledge, perspective, guidance, and collegiality in every phase of the effort has made the work immeasurably better, not just for this study, but for the nursing homes and the residents they serve.

As one facility administrator told us, "I think one of my godsends through this whole situation has been the Austin Public Health Department, I really don't know where we would have been without them...I don't know how people do it in other counties where they don't have Austin Public Health helping them and being that involved with the facility issues...had we not had them I truly believe that we would have been in a much worse situation."

We also want to thank all of the partners that continue to make this project possible and the Steering Committee who continues to serve selflessly.

We are working to secure funding to support the subsequent phases of this work and look forward to collaborating with each of you again.

Thank you.

DESIGN
INstitute for **HEALTH**

Appendix

Phase 2 Secondary Research

Summary of Secondary Research

https://drive.google.com/file/d/127g6OVEmA9os6ZekWfgJRj_cyo1T21Wa/view?usp=sharing

Evolving Guidance

The guidance related to COVID-19 is constantly changing. In the process of creating this report, several updates were released regarding nursing home protocol, processes, and procedures. We have done our best to modify/adapt/incorporate this new information, but we recognize that due to the unknown nature of the disease, the guidance will likely continue to evolve.

These are some of the most recent updates:

- Governor Abbott announces change in nursing home visitation rules in a new Executive Order (Sept 17, 2020) https://gov.texas.gov/news/post/governor-abbott-expands-capacity-for-certain-services-in-texas-announces-guidance-for-nursing-home-long-term-care-visitations

  •HHSC response to Executive Order https://hhs.texas.gov/about-hhs/communications-events/news/2020/09/hhsc-expands-visitation-long-term-care-facilities

- Centers for Disease Control announces new recommendations based on potential airborne spread of COVID-19. https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html

- Commission for Safety and Quality in Nursing Homes releases report: https://sites.mitre.org/nhcovidcomm/wp-content/uploads/sites/14/2020/09/FINAL-REPORT-of-NH-Commission-Public-Release-Case-20-2378.pdf

Additional Resources

MASS Design Group Report on Senior Housing Design Ideas relevant to COVID-19

https://massdesigngroup.org/sites/default/files/multiple-file/2020-07/Designing%20Senior%20Housing%20of%20Safe%20Interaction.pdf

Appendix

Aggregated List of How Might We Statements

Where do we take the Strategic Opportunities from here?

1. Infection Control –COVID-19 and Beyond

- **Accommodating Different Learning Models** - *Training*
  How might we leverage existing best practices for education, comprehension, and retention of information – visual, auditory, and kinesthetic – in order to better meet diverse learning needs and preferences?

- **Building Depth in Knowledge** - *Training*
  How might we foster a deeper understanding of "the why" behind infection control protocols such that staff are empowered through knowledge to take proper, safe, effective action?

- **Cultural Self-Accountability –** *Training*
  How might we foster positive organizational cultures around infection control such that staff are empowered to support and hold one another accountable for their behavior, as opposed to operating in fear?

- **Reducing Physical and Cognitive Load –** *Space*
  How might we strengthen habit formation around key infection control measures by reducing the physical and cognitive effort of the task?

- **Accommodating Staff Basic Needs** - *Human Needs in PPE*
  How might we accommodate staff basic needs, such as using the bathroom, eating, and drinking, during their shifts while still complying with necessary infection control protocols?

2. Staff Wellbeing

- **Preventing Staff Burnout**
  How might we address staff burnout by implementing support systems both within facilities and across the field in order to prioritize staff wellbeing, especially during and after crises like COVID-19?

3. Expansion & Evolution of Staff Roles

- **Qualifying Non-Essential Staff**
  How might we redefine and expedite the qualification of non-essential staff as essential staff in order to create a labor pool capable of supporting resident wellbeing needs?

4. Staff Retention and Incentives

- **Building Staff Morale**
  How might we reimagine staff appreciation and recognition under current budget constraints in order to improve staff retention through meeting psychological and emotional needs?

5. Resident Wellbeing

- **Prioritizing Resident Dignity**
  How might we prioritize the residents' feeling of dignity such that essential services can be expanded to meet these needs?

- **Resident Engagement with Peers**
  How might we balance engagement between residents with appropriate infection control protocols in order to prioritize quality of life and socialization in facilities?

- **Improving Communication Capabilities**
  How might we establish communication tools and procedures in order to increase transparency for families, alleviate staff burden, and improve resident isolation?

- **Sustainable and Adaptable Visitation**
  How might we mitigate the risk of an outbreak under current visitation guidance in order to sustain family visitation for resident wellbeing?

Where do we take the Strategic Opportunities from here?

1. Infection Control –COVID-19 and Beyond

- **Interpreting Infection Control Guidance –** *Training*
  How might we alleviate facilities' burden of accessing and interpreting infection control guidance to focus their attention and energy in a more beneficial way?

- **Differentiated Infection Control Guidance –** *Training*
  How might we facilitate the creation of infection control guidance bespoke to critical facility variances, such as layout, space utilization, and free space, in order to provide facilities with clearer direction and necessary details for efficient operationalization and implementation?

- **Optimizing Existing Space –** *Space*
  How might we adapt or optimize current nursing home facility spaces through minimal physical environment modifications to better serve current infection control needs of the facility?

- **Improving Staff Experience in PPE** - *Human Needs in PPE*
  How might we evolve the materiality, wearability, and functionality of PPE to improve staff comfort and experiences while wearing it for extended periods of time on COVID-19 isolation units?

2. Staff Wellbeing

- **Prioritizing Staff Mental Health**
  How might we prioritize mental health support and resources for facility staff in order to reduce burnout?

3. Expansion & Evolution of Staff Roles

- **Expanding Staff Capability**
  How might we leverage subtle modifications to current staffing in order to maximize potential staffing resources?

4. Staff Retention and Incentives

- **Improving Remuneration**
  How might we improve staff retention through innovative solutions such that long-term care becomes a lucrative career for healthcare workers?

- **Building Staff Camaraderie**
  How might we incentivize staff to strengthen the long-term care workforce such that they are working with people they like and are more likely to stay?

- **Developing Cultural Leadership**
  How might we better understand best practices in successful, high-retention workplace cultures, including leadership characteristics, in order to create shareable learnings for other facilities?

5. Resident Wellbeing

- **Re-establishing Visitation**
  How might we design a visitation area that can be used for future pandemics or immunocompromised visitors such that the experience respects resident privacy, incorporates the element of touch, and provides a sustainable, long-term resource?

- **Leveraging Community Assistance**
  How might we leverage and engage community networks and organizations to provide resources and connection to residents such that a sense of normalcy is brought back to the facilities in a COVID-safe way?

- **Communication Technology Solutions**
  How might we implement accessible and appropriately designed technology and/or systems to meet the communication needs of family members and residents in order to improve transparency and communication channels?

- **Coordinated Outbreak Isolation**
  How might we redesign nursing home facilities in order to create pods or villages for coordinated isolation during a future outbreak or pandemic?

Where do we take the Strategic Opportunities from here?

1. Infection Control –COVID-19 and Beyond

- **Contained Networks Across the System –** *Training*
  How might we establish networks / contracts of trust across care facilities in the system (i.e. nursing home and a specific hospital or specialty clinic) such that infection control concerns can be effectively prioritized or deprioritized?

- **Flexible Space Considerations –** *Space*
  How might we facilitate infection control preparedness bespoke to facility variances, such as layout, space utilization, and free space, in order to allow for more flexible spatial implementation of protocols?

- **Equitable Access to Resources** *- Human Needs in PPE*
  How might we ensure timely, adequate access to resources critical for infection control (e.g. PPE) during times of crisis?

- **Proactive Future Planning** *- Human Needs in PPE*
  How might we be proactive in our infection control measures and preparations despite the uncertainty of what the future holds for future pandemics and disease outbreaks?

2. Staff Wellbeing

- **Supportive Staff Spaces**
  How might we reconceive staff experience through physical space in order to prioritize staff wellbeing during each shift?

- **Community Partnership to Support Staff**
  How might we create a system to facilitate community partnerships in order to connect nursing homes to altruistic companies looking to support staff wellbeing?

3. Expansion & Evolution of Staff Roles

- **Addressing Staffing Gaps**
  How might we proactively prepare for potential staffing gaps for future pandemics and/or outbreaks?

- **Advancing Staff Training**
  How might we advance and iterate the curriculum and training of nursing home staff in the education system such that it prepares them for the evolved needs of nursing home resident today, and beyond?

4. Staff Retention and Incentives

- **Redefining Career Value**
  How might we reframe and redefine the value proposition for working in long-term care in order to motivate healthcare workers to pursue a career in long-term care and stay in the field?

5. Resident Wellbeing

- **Improving Family Placement Knowledge**
  How might we educate family members about long-term care such that family members are making educated decisions about placement prior to a family member in a time of crisis?

Appendix

Phase 1 Insights

INSIGHT 1

Theory vs. Reality in Nursing Homes

Many COVID-19 infection control protocols are fundamentally misaligned with the realities of both living and working inside a nursing home. This results in significant effort to comply with recommendations that are logistically and operationally challenging, clinically misaligned, and at times behaviorally infeasible.

INSIGHT 1 Theory vs. Reality in Nursing Homes

Financial Impact of Isolation Unit: Recommending facilities hold a specific number of beds for their isolation unit is not financially sustainable for facilities as it requires utilizing some double occupancy rooms as single occupancy or cordoning off rooms for a "just in case" scenario

Financial Impact of Limiting Elective Surgeries: Facilities are still holding beds for Skilled Nursing care post-elective surgery as they are a significant source of revenue, however, in the "new normal" of COVID, it is both challenging to project when, if at all, elective surgeries will be consistent once more

Increased Scrutiny of Potential Resident Admissions: Due to infection control concerns, facilities are needing to be more selective about who they can admit into their facility given the increased liabilities of residents who, for example, are "wanderers" and might be unable to abide by social distancing practices

Increased Burden of Telehealth: As primary and specialty care has transitioned from in-person to remote delivery due to COVID-19, a new task and burden has been placed on staff to manage, conduct, troubleshoot, and sanitize all that is required for telehealth visits to operate safely and effectively

Entrance to isolation unit that currently has no COVID-19 positive cases

Isolation Unit Design Requirements Conflict with Life Safety Code: Design guidance for isolation units include the need to prevent circulation between isolated and non-isolated parts of the facility with plastic sheeting or new dry wall; however, in doing this, it blocks egress and creates a new set of safety challenges.

Isolation Units Displace Existing Residents: To create isolation units in some facilities, residents living in the targeted units must be moved out of their room, which is considered their home, thereby displacing these residents, disrupting their routine, and causing confusion.

Bedside Care: CNAs cannot perform a majority of their care for residents from 6 feet away, such as changing resident catheters. At times, staff use workarounds (i.e., clean gloves in pocket) to increase efficiency, but knowingly risking a regulatory violation.

Staffing Restrictions: By limiting which staff works in which units to eliminate crossover, some residents experience an abrupt break in their relationship with staff members who they've come to know and trust well, thereby resulting in an added emotional strain for the resident.

Resident Appetite: Some residents are eating less because they are unable to socially dine with others due to social distancing protocols.

Rolling barrier for isolation unit, created by facility to use for isolation unit, but unutilized due to concerns about ease of displacement

Decreased Socialization with Other Residents: Families often place residents in nursing homes to increase their opportunities for social interaction, and therefore, overall wellness; however, due to social distancing protocols, many of these interactions have been limited or eliminated

Lack of Visitation: Since outside visitors have been restricted, a significant cognitive and emotional decline has been observed in residents who were accustomed to having visitors

Lack of Field Trips: Since field trips have been eliminated, a significant cognitive and emotional decline has been observed in residents who were accustomed to leaving the facility for outings

PPE & Resident Fear: Some residents have strong, negative responses to seeing staff in PPE as it is unfamiliar and/or they might not fully understand the rationale or recognize staff with whom they previously had relationships

Face Coverings & Social Distancing: Dementia residents struggle with wearing face coverings and can't socially distance due to their cognitive ailment

Face Coverings & Hearing Impairments: Residents who are hearing impaired can't read lips and understand verbal communication if staff members are wearing face coverings

Residents gathered for hallway popcorn with activity coordinator (illustrated to protect privacy of individuals)

"[Social distancing] is not a thing. I mean, you can try as much as you can, but it's not possible in this environment to socially distance all the time. Even me sometimes when I'm going around and staff asks me, 'Hey, can you do this for me?' I have to come within six feet of them and assist with whatever. It's not possible in this environment."

- Assistant Director of Nursing

"Some residents are unquarantinable. It's their right to leave their room."

- Director of Nursing

"Right now, I feel sorry for Memory Care [units] that have COVID because those patients wander. I don't know...Unless you personally hire one assistant per patient. I mean, I don't know how they're [Memory Care Units] doing it...I've halted all wandering admissions, I will not take a wanderer. I see that it's just a risk for me."

- Director of Nursing

INSIGHT 1 Theory vs. Reality in Nursing Homes

In spite of the challenges, some early responses illustrate workarounds:

1. Standing outside the room to conserve PPE (i.e., gown) and talking to the resident from 6 feet away with a mask on

2. Putting fresh gloves in scrub pockets to limit movement across the room

3. Residents visiting world-wide locations through a virtual platform instead of taking field trips

4. Window visits as a way to maintain connections between family and residents

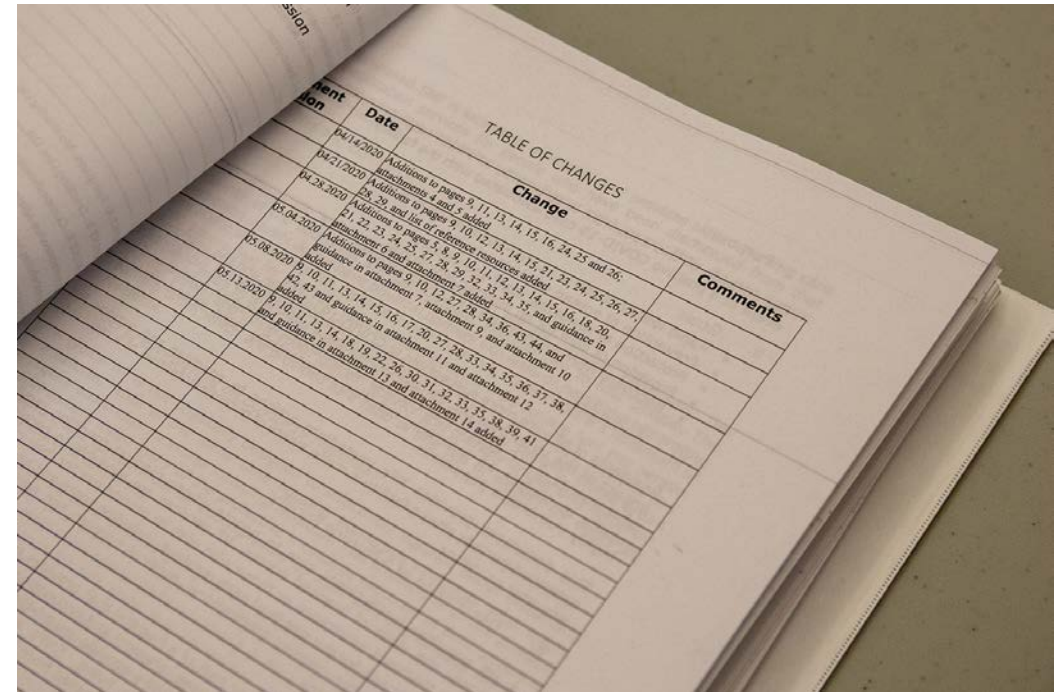# INSIGHT 2

Evolving Guidance and Recommendations

Nursing homes receive conflicting or hard-to-interpret guidance for COVID-19 infection control – recommendations are communicated frequently, often from different sources, and lack clear, actionable directives for implementation, resulting in Directors of Nursing (DONs) and Facility Administrators absorbing the responsibility of clinically interpreting and operationally translating these evolving guidelines into action. Given the complexity and possible enforcement, DONs and Administrators are forced to deprioritize their other critical duties, as this sensemaking process necessitates tremendous time, collaboration, and decision-making.

INSIGHT 2 Evolving Guidance and Recommendations

Unclear Infection Control Guidance: Because COVID-19 infection control guidance lacks clarity for how it needs to be implemented, every iteration triggers the following decision-making process for nursing home administrators:

- What did the previous existing published guidance state?
- How is this new guidance different?
- How does this guidance specifically affect my facility?
- What potential challenges might this guidance cause for me and my team?
- How might we tactically and/or operationally implement these changes?
- How do we prioritize these changes against our other existing duties and obligations?
- Who do we go to if we have questions or need clarification on these changes?

Penalties and Incentives: While numerous penalties exist for not following COVID-19 infection control guidance, facilities receive no incentives for maintaining a COVID-19 negative facility.

Director of Nursing COVID-19 Protocol binder: Page indicating regulation changes from previous versions

Impact on Facility Operators: A facility's ability to interpret COVID-19 infection control guidance and translate them into implementation strategies is partly contingent upon the quality and competency of different nursing home operators. Our research found that individually operated facilities tend to follow the guidance they most strongly agree with that protects the safety of their staff and residents; facilities with strong corporate operators benefit from clear direction and support; and facilities with weak corporate operators often have to manage this as an additional source of confusion and conflicting information.

Lack of Support for Staff: Staff noted that sources for clarification or support were frequently limited by barriers to access or were unaccommodating of staff needs (e.g. webinars stating they won't address any questions previously answered in prior webinars)

Housekeeping binder for facility

COVID-19 binder for facility

INSIGHT 2 Evolving Guidance and Recommendations

"There are lots of mixed messages with COVID information...we don't know if what we are doing is right."
- Infection Control Nurse

"We listen to whoever can get us in the most trouble."
- Director of Nursing

"Every day it's webinars and training that's all every day. So today from 2-3:30 PM is our HHSC call where they give weekly updates. And so, every Thursday, I'm in that meeting. And then every Tuesday, we have Austin Public Health call at 1:00 PM. So that's an additional webinar. And then every Friday at 8:30 AM, we have infection control with HHSC call. So those are three every week calls plus the additional calls from our company about infection control...But it's just frustrating because it's so...from Austin Public Health, from HHSC, you never know what's the new rule each week."
- Director of Nursing

INSIGHT 2 Evolving Guidance and Recommendations

In spite of the challenges, some early responses illustrate workarounds:

1. Competitive in-services for staff: how to don and doff PPE using competition as a motivation

2. Connecting with peers on Facebook groups to brainstorm ideas around activities for residents as local social distancing guidelines shift

INSIGHT 3

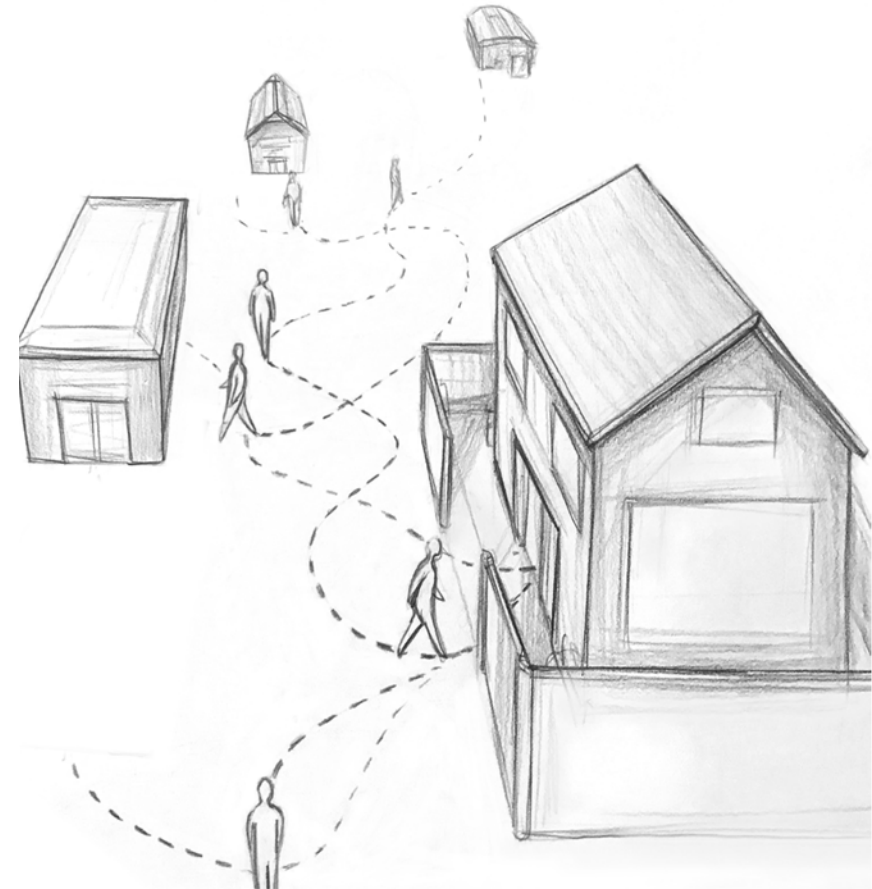## Staff Behaviors, Sacrifices, and Risks

The novelty and unknown characteristics of this virus have presented a new challenge to nursing homes as significant risks for COVID-19 transmission do not solely exist within the facility but can be introduced through those who traverse external facility boundaries as well. While it is understood that staff choices in their personal lives, such as social distancing, are a key component of a facility's ability to control infection, facilities likewise acknowledge that they can neither monitor nor control staff behaviors off the clock.

INSIGHT 3 Staff Behaviors, Sacrifices, and Risks

Staff Fear and Guilt: Due to fear and the potential guilt of being "that person" who brings COVID-19 into a facility, many staff are choosing to make sacrifices in their personal lives, such as not seeing their own families, in service of prioritizing the health and safety of their residents and colleagues.

Concerns for the Future: Yet, some staff also expressed concern over how sustainable and effective these self-elected behaviors would be given the State's phased reopening, coupled with the waning compliance of some citizens as they become increasingly restless due to stay-at-home orders.

Staff Risk: Hourly staff who previously worked at multiple facilities, are now confined to working in a single facility, are at risk of losing income if that facility encounters problems.

Staff movement in and out of facilities carries unseen consequences

INSIGHT 3 Staff Behaviors, Sacrifices, and Risks

"I don't go anywhere. I tell my family because of the fact that I want to stay COVID free ...I always tell them I don't want to be the one that brings it to work...I try not to go out very often [to the grocery store] if I don't have to. No one's allowed at my house. It's just affected me personally just completely. I completely social distance myself from people."
- Assistant Director of Nursing

"When staff leaves, we pray and hope they're social distancing."
- Human Resources Manager

"I'm not saying that our employees are being careless necessarily, but because economies are opening, there's just more chance for contact outside of our four walls. No matter what we put in place at the facility, once our employees leave and do things outside, even if they have the best intentions, given everything that's going on now, and especially in Texas, and even more specifically, in urban areas, I get anxious."
- Facility Owner/Operator

INSIGHT 3 Staff Behaviors, Sacrifices, and Risks

In spite of the challenges, some early responses illustrate workarounds:

1. "Commitment" pay for staff for choosing to stay at one facility: an additional $2/hour for day shift and $4/hour for night shift

2. Free employee meals during shifts

INSIGHT 4

Psychosocial Consequences of COVID-19

Resident isolation from family, friends, and other residents has resulted in a cascade of resident psychosocial consequences, such as depression and loneliness. With families currently unable to provide support to residents, staff choose to absorb this emotional burden themselves – a response that is not sustainable long-term. However, with no end in sight to visitation restrictions, the potential for resident decline and staff burnout in the near-term seems inevitable.

INSIGHT 4 Psychosocial Consequences of COVID-19

Increased Family Requests: Because family and other external visitors are currently not able to visit residents, they are now calling an already overworked staff for any and all needs (including requests such as finding a resident's missing sock).

Staff Processing Needs: Staff are more than their role in the nursing home. They, too, are people experiencing and living in a pandemic, hoping for an eventual return to pre-COVID "normalcy", who likewise have emotions, thoughts, and other needs to process above and beyond their professional duties.

"I know Mr. Smith- It's hard to hear or see your wife on Facetime... it's hard because she doesn't recognize you."

Increased family requests place additional burden on staff and communications

Staff Retention: Nursing home staff acquisition, and retention, are two long-standing challenges in the industry due to the hard labor required for low pay; however, offering hazard pay is facility-dependent, which means staff in some facilities are being asked to absorb numerous other duties out of the goodness of their hearts or other intrinsic motivation.

Impact of Staff Burnout:
Increasingly overburdened staff are ill-equipped to properly care for ailing residents.

Dining hall with increased table spacing to discourage congregating

Common area no longer in use due to infection control/social distancing precautions

INSIGHT 4 Psychosocial Consequences of COVID-19

"I don't know how the staff is coping. I don't know what happens when they get in their car after work."

- Social Worker

"How long can we sustain this before we see residents start to die from the depression and isolation? There has to be a middle ground between rules and regulations and what people need. It's awful watching them decline."

- Social Worker

"They are all dying from the isolation. The disease isn't killing them, it's the loneliness."

- Social Worker

INSIGHT 4 Psychosocial Consequences of COVID-19

In spite of the challenges, some early responses illustrate workarounds:

1. Lowe's built and donated a visiting booth for families to visit with relatives in an infection-controlled environment

2. Manicures every Saturday and haircuts (with permission from family and resident) to help preserve the dignity of residents

3. Inspiring quotes on whiteboards in the hallway that are continuously updated

4. For residents who don't have family connections, volunteers to fill the gap and provide virtual visits

5. Staff providing special meals or celebrations for residents as a way to improve morale

6. Resident families providing meals to residents

Statement of Work

This effort will be subdivided into five phases of work:

PHASE 1 – FOCUSED INVESTIGATION (5-6 weeks)

Time is of the essence, and this first phase of work will begin where the most immediate impact is likely to be had, focusing on expected issues involving:

- Proximity and physical space layout - resident and caregiver density, shared utilization of space, flow of materials and people through the facilities
- Operational frameworks and processes – care protocols, group activities, caregiver handoffs, scheduling and timing of care
- Staffing – personnel roles and responsibilities, staff concerns and priorities

All of these will need to be considered in the context of resident and family needs. The investigation will utilize design research methods that focus on in-situ observation and in-person interviews of administrators, staff, and residents, as they are most often revealing of systemic gaps, conflicting priorities and collisions, and unrecognized or unexpressed behaviors that affect the care and safety of the residents and staff. Prior to any field research, the team will understand at depth the ongoing effort of the current emergency response spearheaded by the Health Authority, Austin Public Health, and the Nursing Home Task Force.

Activities and deliverables include:
- Background research and immersion into existing emergency response
- Coordination with care facilities and oversight agencies
- Research observations in nursing home facilities with variations in size and layout
- Interviews with stakeholders (administrators, staff, patients)
- Preliminary interim share out of initial insights from observed facilities
- Synthesis of research to detail initial findings, immediate possible responses, and areas for further study
- Report out to City Council and other stakeholders

Statement of Work (continued)

PHASE 2 – BROADENED INVESTIGATION (5-6 weeks)

The first phase of work will undoubtedly reveal areas of investigation in the original scope of research that require more in-depth investigation, as well as new opportunities to have impact that merit exploration. The focus of this second phase of work is to explore more deeply and broadly, as informed by insights from the first phase of work, and from input from the Health Authority, Austin Public Health, the Nursing Home Task Force, and other stakeholders. While the focus of this phase of work will depend substantially on the output from previous phase, some of the expected effort can be described:

- In-depth interviews with varying staff roles, residents, and family
- Consideration of the role and utilization of technology
- Expansion of focus to assisted-living facilities, and other facilities of relevance (including representation from individual non-profit, corporate non-profit, and corporate for-profit operators, as willing and available)

Activities and deliverables include:
- Additional site observations and synthesis of findings
- Development of new strategies and options for care models and frameworks, and initial notional design concepts for space, protocols, workflow, staffing, use of technology and other relevant ideas
- Report out to City Council and other stakeholders

Statement of Work (continued)

PHASE 3 – DESIGN & DEVELOPMENT (7-8 weeks)

The goal of this third phase of work is to design and develop real responses to the strategic opportunities from the previous phase. This phase of work will begin with a collaborative work session involving stakeholders from the Health Authority, Austin Public Health, and the Nursing Home Task Force, nursing homes and assisted-living facilities, and from the Texas Health and Human Services Commission. The insights and strategies from the previous phases of work will be reviewed, refined, and then responses developed to the most promising opportunities and challenges. The early concepts that arise from this work session will then be refined in more detail, as the first stage of developing prototypes that can be evaluated. The detailed designs will be illustrated at an appropriate level of resolution to convey future scenarios and a review session with stakeholders will be held to assess intent and viability. Based on the feedback, the concepts will be refined, and in coordination with cooperating facilities, early planning for prototypes and pilots will begin.

Activities and deliverables include:
• Work session with extended set of stakeholders to develop conceptual responses
• Design and development of concepts
• Interim concept review meeting
• Refinement of concepts and development of prototypes and pilots
• Report out to stakeholders

Statement of Work (continued)

PHASE 4 – PROTOTYPE & PILOT (7-8 weeks)

In this phase of work, the refined concepts will be put into practice with cooperating facilities. Prototypes, which are intended as deployments meant to answer unanswered questions, are mechanisms for continued learning and refinement. Metrics will be established to define success before deployment of prototypes. Ongoing evaluation and nimble iteration will allow the prototypes to evolve quickly until they demonstrate effectiveness, or to be concluded if they prove ineffectual.

Prototypes then graduate to pilots, which are larger scale efforts just big enough to prove efficacy and viability.

Activities and deliverables include:
- Evaluation of cooperating facilities' capacity and capability for prototypes
- Co-development of prototypes and integration with facility operations
- Definition of metrics and protocols
- Deployment and iteration of prototypes
- Deployment and evaluation of pilots
- Report out to stakeholders

Statement of Work (continued)

PHASE 5 – IMPLEMENTATION & RECOMMENDATIONS (4-6 weeks)

In this last phase of work, the focus of effort is on developing pathways to large-scale implementation, and associated recommendations that may be helpful to agencies with statutory oversight as they consider facilitating necessary change. As the nature of the new interventions is necessarily unknown at this point, the deliverables can take on a number of forms – from suggested layouts, to new operational models, to new staffing guidance.

Activities and deliverables include:
- Aggregation of prototype and pilot learnings
- Development of large-scale implementation guidance
- Development of recommendations
- Comprehensive report out to stakeholders