ICAA® Forum 2023

The promise of well-tech

Outcomes from the ICAA Forum October 2023

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International Council on Active Aging

THE ICAA FORUM FALL 2023

The ICAA Forum think tank gathers thought leaders from senior living and wellness-focused organizations to formulate philosophies and recommendations that benefit individuals and organizations. Launched in 2005, the meetings forge connections among industry leaders while promoting understanding and cohesive action around the ultimate goal: health and quality of life as people age.

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International Council on Active Aging® (ICAA)
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The International Council on Active Aging has led, connected and defined the active-aging industry since 2001. Founded in the belief that unifying the efforts of organizations focused on the health and wellness of older adults benefit both the people they reach and the organizations themselves, ICAA's vision is shared by over 10,000 organizations. ICAA's support of the active-aging industry includes industry research reports, program development, market development, education and research on healthy aging and wellness, public relations campaigns and recognition programs.

ICAA Education, Inc., a sister company, develops and delivers courses to help active-aging professionals build needed skills and knowledge to impact older-adult wellness and the business bottom line.

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SUMMARY

Wellness technologies (well-tech) provide the tools that people use to enhance personal health and wellness and generate data for successful, value-based operations. Residents, clients, staff members and administrators/executives can take advantage of well-tech's potential. At the International Council on Active Aging® (ICAA) Forum think tank, a select group of 60 leaders in senior living, community-based services and industry suppliers identified the culture and procedures that support an effective implementation of well-tech.

Wellness technology refers to:

- Resident-facing technologies that enable communication, engagement and self-care.
- Technologies that enable staff members to communicate and engage with residents.
- Tech to help organizations deliver services and lifestyle opportunities.

Forum delegates developed a set of principles to guide the vision, selection and adoption of well-tech.

Principles:

- Technology strategies serve the organization as a whole, supporting all functions and departments.
- The people who will use the technology are involved in the decision-making.
- The utility and usability of a technology for each user is examined.
- No technology is selected until troubleshooting, training and long-term support are in place.
- Long-term partnerships between providers and tech companies for development and support maximize value for both organizations.
- Data is useful only when it can be analyzed to find meaningful patterns and trends.
- Training in collecting and interpreting data is provided to staff and leadership.
- Cross-functional teams analyze data to track wellness outcomes.

Well-tech can generate data that prove the value of wellness, personalize services for residents and customers, and increase self-care because information and resources are in the individual's hand. It can enhance communication among staff members and share their workloads.

Delegates at the ICAA Forum affirmed that technology does not overshadow the person-to-person interactions that are the heart of senior living. Technology is a tool; it does not replace the people who live and work in a community.

WELL-TECH OVERVIEW

The intersection of technology and senior living

Wellness is derived from our ability to understand, accept and act upon our identity and capacity to lead a purpose-filled and engaged life. In doing so, we can embrace our potential (emotional, environmental, cognitive/intellectual, physical, social, spiritual and professional/vocational) to pursue and optimize life's possibilities.
–International Council on Active Aging

From the GPS in your phone to the fingerprint scanner you pressed to open the door at work, technology, like wellness, is part of everyday life. Technologies burst into the wellness environment in 2020 as pandemic shutdowns forced the rapid transfer of activities, socialization and fitness onto screens and through cell phones. Video conference capability for residents and clients (75%), infrastructure for high-speed Internet (71%) and resident/client access to Internet and social networking sites (57%) became more common due to the investments reported by chief financial officers at senior living communities.[1]

Fast forward to 2023, and even more technologies are being developed and publicized. The challenge for all organizations—senior living or community-based services—is plowing through the blizzard of technologies that are being offered.

The big questions are: What can all these technologies do for the quality of life of individuals and the operations of organizations?

The interest in effectively using wellness technologies (well-tech) is high, but the answer to these questions is not straightforward. The ICAA Forum on well-tech was organized to design an approach that aids organizations' readiness, implementation and adoption of well-tech. The result is an outline of the issues senior living decision-makers consider when evaluating technologies and the planning steps that well-tech teams can use to move from vision to implementation.

What is wellness technology?

For this report, well-tech refers to:

- **Resident-facing technologies that enable communication, engagement and self-care.** For example, video and voice-technologies, activity trackers, virtual coaches, assistive technologies for vision or hearing, diet, fitness and motivation websites, applications (apps) for exercise, diet and chronic condition management.
- **Technologies that enable staff members to communicate and engage with residents**, such as virtual reality, virtual exercise and activities, audio communication and software to track special diets.
- **Tech to help organizations deliver services and lifestyle opportunities**, such as robot servers, falls risk assessment equipment or cognitive skills training, point of sale software, restaurant inventory systems, business management and human resources software.

(Medical care and healthcare technologies are not included in this report, although they are on the continuum of wellness technologies, because of their specialized uses within the medical paradigm.)

There is no doubt that well-tech plus the data it produces has potential to positively impact lives and operations. When tech handles paperwork and back-office administration, staff members have time to build relationships with residents and customers. Feedback to refine operations and develop new offerings can be collected. And technology breaks through the walls of a community to access the outside world while simplifying the ways the larger community can come inside.

Technologies can link individuals to the promise of person-centered wellness: placing each individual at the center of the program, process or procedure.

Where do communities and technologies meet, or collide?

"Right now, so much technology is being developed, deployed and pushed onto the senior living provider. Some I believe to be very beneficial. Other products seem more like fluff. … Whatever product is developed, it [should] measure what it is intended to measure and, at the end of the day, guide decision-making."

Technology manufacturers and service providers, on land or in the cloud, see the potential of technology to improve or extend their product lines, whether

tech is part of the original product or an add-on. Internet-accessed services are common. Companies build their products to serve a purpose or a homogenous user. For example, restaurant inventory management software helps dining rooms, fitness equipment is aimed at gyms and studios.

Senior living communities, with some combination of housing, dining, social gatherings, educational programs and physical activity, are not homogenous. These communities operate three or four types of businesses under one roof, with health care adding a separate entity. In the community at large, active adult centers are similar, with cafes, cultural programs and physical activity plus social services under their roofs.

As a result, each department in an organization is buying and using technology in its own way independent of others. One reason is that purpose-built equipment or software was never intended to communicate or share information with other systems. Technologies work well when the purpose is clear and narrow. The data from restaurant management software does not connect to data from a fitness app.

That leads to the second issue for communities striving to integrate data from multiple systems. Often data, especially program data, sits in separate silos across organizations, making it difficult to locate the data or figure out how the data points relate.[2]

To rectify this issue, some large senior living corporations are building their own platforms to gather and analyze data. With the same mindset, some technology companies are offering a single software solution to collect information along different points of the resident's day.

And that arrives at the primary challenge for wellness leadership. Although wellness is a fundamental of quality of life and well-being, often it is not associated with data, or with the bedrock purpose of the organization. Plus, wellness overlays multiple departments and functions, which are often prioritized and budgeted separately as if each had no relationship to the other. Residents, their families and clients, of course, see the whole. And wellness leaders need data that can be used to prove the value to the residents and to the organization.

What is the data opportunity?

> *"Numbers in and of themselves allow us to ask questions, they don't always mean something. Look at the trend over the last three months. I think there's some things on the market that are just collecting data so they can say they collect data."*

Data are the statistics that are collected and recorded. (Data is plural, datum is a single data point.) A simple way to use data is by tracking steps on a cell phone or pedometer and comparing it to the number of steps logged the day before or last week. More sophisticated technologies keep track of this for the user (Fitbit, Apple watch).

Big data, like the name, is a very large, hard-to-manage quantity of data points, which can come from a variety of inconsistent sources.

To make data useful, **data analytics** methods are used to "clean" the data of errors (such as duplicates or formatting) and prepare it for analysis. Statistical techniques are used to search for patterns, trends and correlations. Data analysis, especially for big data pools, is a specialty that requires expertise in cleaning the data, statistics, data visualizations and problem solving.

In addition to proven data analysis methods, **artificial intelligence (AI)** opens up possibilities for analyzing all that data. Artificial intelligence is based in complex algorithms; recent generative AI programs (think of ChatGPT, Dall-E or Bard) can produce text, imagery, audio and video. These systems can scour huge amounts of information, often culled from Internet postings, and provide answers to a request based on key words, grammar and other elements.

However, these AI models are not perfect. Results from artificial intelligence can be wrong, garbled or "made up" (a hallucination). Artificial intelligence can collect, but it cannot tell you why it chose the words or built that staff schedule or put those

ingredients into a recipe. AI does heavy lifting, but a person reviews, double checks and decides if the output meets the need. Allowing for its faults, programs using artificial intelligence are valuable assistants to sort through large pools of data.

The potential and problems associated with AI were captured in a report from Deloitte. While the majority of business leaders (94%) across all types of industries agreed that artificial intelligence will be very important/important over the next five years, nearly half (46%) believed it would be difficult to integrate AI into daily operations and workflows, and 44% were concerned that AI solutions are too complex or difficult for users to adopt.[3]

The emphasis on technology that generates data for business intelligence is an opportunity for data collected through person-centered wellness to emerge as a powerful contributor to the life of older adults, as well as the operations in senior living.

Recognize the challenges for technology adoption

When asked to name the top concerns they have about technology, ICAA Forum delegates gave consistent responses, suggesting these are common across the industry.[4]

1. **The cost of current and new technologies was the most frequent concern.**
   "Most pressing is the cost to the community, and how we can accommodate that when so many technologies are being thrown at different departments within senior living. How do we pay for it all?"

2. **Ease of use and accessibility is an issue for providers and for developers.**
   "Our residents face challenges due to limited digital literacy, physical disabilities and cognitive impairments. They need large fonts, easy navigation, voice commands and compatibility with assistive devices like screen readers."
   "No matter how easy we think our tech is, someone always needs an explanation."

3. **Staff adoption, training and burden.**
   "We haven't equipped the current workforce with the tools/training/time to confidently use the tech we currently have."
   "The many flaws and issues each new program or equipment comes with. Staff members are reaching burnout on managing new things continuously."

4. **Lack of technology that is useful for decision-making or meeting a need.**
   "Not having enough of the right technology to collect the data necessary for our operators and practitioners to make informed decisions and assessments."

5. **Privacy and security of information collected within a technology.**
   "We deal with sensitive personal and health information. Concerns such as data breaches, unauthorized access to personal health records and misuse of data are significant. Compliance with data protection regulations, secure authentication methods and regular security audits are essential."

MAP THE TECHNOLOGY

Move from vision to implementation

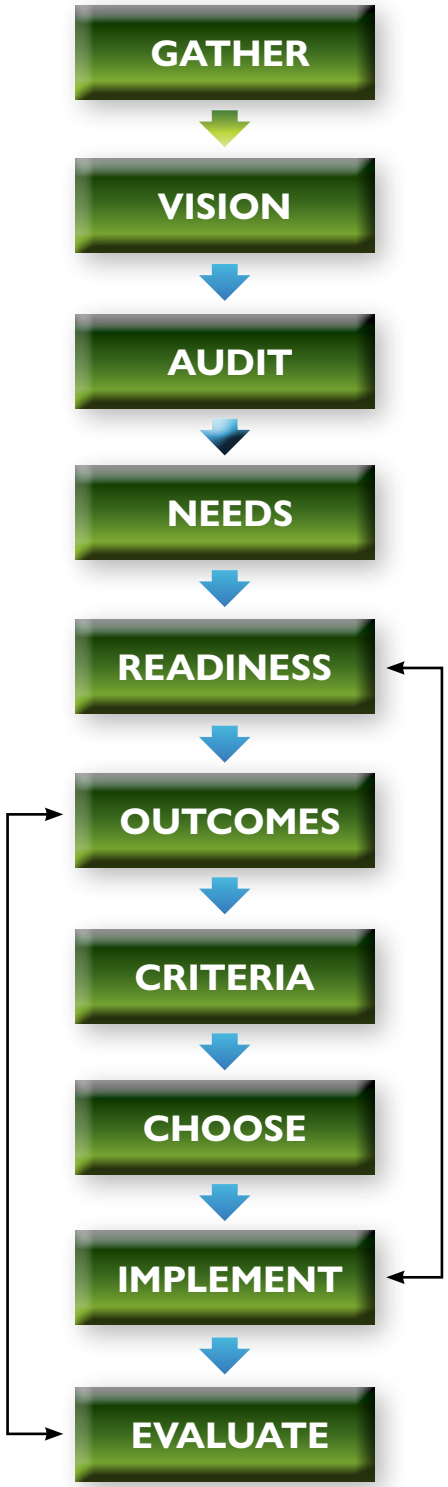
> *"Technologies are not a license to adopt an unhealthy lifestyle. An unhealthy lifestyle will shorten your life even if you are on gerotherapeutics that are designed to compress morbidity and disability. Can we be healthier tomorrow than we are today? Absolutely. And the way that can be done is with diet and exercise. Technology partners with healthy lifestyles, it does not replace them."*
> -- Jay Olshansky, PhD

Technology is advancing rapidly, at times moving faster than people and organizations. Take the time to plan how well-tech could benefit the people and the company by following a 10-step planning method to move through stages of discovery, selection, adoption and implementation.

Start from the foundation of the wellness technology guiding principles, listed in the Summary of this report. Then collaborate with people across the organization, asking a lot of questions each step of the way.

Here's the approach:

1. **Gather:** Bring together a well-tech team and identify tech leaders.
2. **Vision**: What will happen in the future because of well-tech?
3. **Audit:** What is already in place across the whole organization?



4. **Needs and opportunities:** What are the gaps well-tech might fill?
5. **Readiness:** Who are the people and what are the structures that need to be in place?
6. **Outcomes:** Which results help residents, staff and customers and align with business needs?
7. **Criteria:** What are the need-to-have and nice-to-have characteristics?
8. **Choose:** Which technologies promise to meet a need, advance an opportunity or generate useful data?
9. **Implement:** How will the well-tech roll out and be sustained over time?
10. **Evaluate:** What happened during the well-tech implementation?

Readiness and Implement circle around one another. Challenge with implementation? Go back to readiness, adjust and return to implement.

Outcomes and Evaluation go back and forth. Evaluation isn't showing change or data isn't meaningful? Go back and refine the outcome measures.

Use the information you gather, and the questions you encounter along the way, when building your case within the format that works best at your organization. The ICAA Well-tech Toolkit has forms and examples to use during the process.

ICAA Well-tech Toolkit

- ✓ Well-tech implementation checklist (Preparation, Audit, Readiness, Adoption, Sustain)
- ✓ Resident adoption mind map and priority matrix
- ✓ Staff adoption mind map and priority matrix
- ✓ Checklist for evaluating technology

10-Step Planner

1. Gather

Bring together a well-tech team and identify tech leaders.

Collect your allies for a well-tech team, thinking both short-term and long-term. Reach out to people who have a vested interest in its success. For example, marketing leader, volunteer coordinator, activities/engagement director, fitness director, resident council members, technology expert, chef, administrator. Include all the people who will ultimately use technologies. You may want two groups. One is the smaller core group of well-tech planners, and the second a wider group of well-tech advisors.

Organizations typically have a technology strategy to set direction and a technology roadmap to implement the strategy. Discover the technology strategy that may already be in place so you can determine where or how to fit wellness into the technology roadmap.

- ☐ What is the current companywide technology strategy?
- ☐ Who is the chief technology officer or chief information officer responsible for the plan?
- ☐ Does the technology roadmap cover the whole organization or only one or two departments?
- ☐ Is wellness included? How is wellness defined in the strategy and roadmap?

Now is a good time to build a positive, ongoing relationship with the head of information technology.

2. Vision

What will happen in the future because of well-tech?

A vision is about the future, not where the company is today. The vision can unite everyone around the purpose of well-tech in your organization. As time goes on, it's a reminder about what the future can look like. Write a vision statement that is short, compelling and paints a picture of the future.

Start from the foundation of the wellness technology guiding principles (find them on the first page of this report).

- ☐ Are there key words to consider from the organization's vision or mission?
- ☐ What do team members suggest? Crafting a vision is a team project.
- ☐ How would technology enhance quality of life for residents, staff members? For decision-makers?
- ☐ Does the vision apply to the whole organization?

For example: We will use wellness tools and environments so residents can engage in their best possible lives. Or: Well-tech will enable person-centered wellness. Or: Well-tech is the tool that creates value for everyone who lives and works here.

3. Audit

What is already in place across the whole organization?

Call on well-tech team members to itemize the software and hardware currently being used and record their findings in a central file. Chances are, one department manager may not know what the others have. The information technology officer probably has a list of what is in place and planned, organized in the technology roadmap.

- ☐ What equipment and data sources are already in place?
- ☐ What systems already in place have an add-on module available?
- ☐ Is a solution found in a consumer technology (Facebook or Facetime) or equipment with a data function (treadmill that saves user data) or a tech-driven hardware or software (AI data analysis)?
- ☐ What infrastructure is needed to support the tech?
- ☐ What training or tech support is already in place? What is needed?

For example, is there a point-of-sale system for residents to make reservations for dining or planned programs? What data does it produce? Or a software for engagement staff to build calendars to publish online or through a private resident/staff portal. Is it a specialized software from a company, or are they using the publishing and record-keeping on PC or Apple computers?

MAP THE TECHNOLOGY *Continued*

4. Needs and opportunities
What are the gaps well-tech can fill?

Consider what you could use in the future, not only what is in place today. This is where speaking with people in all departments and across responsibility levels comes in. The well-tech planning team and advisors are especially helpful.

- ☐ What repetitive tasks could technology assume to free up staff time?
- ☐ How could the data that accompanies equipment/software be used?
- ☐ What tech would help staff members evaluate the effectiveness of programs?
- ☐ If money, staff and time were no object, what would benefit users? Staff? Administrators?
- ☐ What well-tech questions should be added to resident and staff surveys?

For example, if you could connect residents' meal choices with their activity levels in the fitness center, would it give you the information to jointly create an education program with the chef, dietitian and fitness instructor on nutrition for exercise? If you could see a change in a resident's participation in cultural and intellectual activities, could you visit the person to find out if there was a change in the resident's health or emotional wellness?

5. Readiness
Who are the people and what are the structures that need to be in place?

Before you can integrate well-tech across the organization, decision-makers must have buy-in, and so do the people who will use the technology. Prepare the implementation plan before you launch a new technology and use it to check that the organization is ready to make it successful. Take the time that is needed to be sure everything is in place.

- ☐ Who are the people who will be using the technology (residents, staff, families, executives)?
- ☐ Who will be impacted by it even if not the primary user? Staff? Residents? Suppliers?
- ☐ Is the training and support in place?
- ☐ Is there a room or a space where the well-tech can be used? Will space need to be remodeled to accommodate it?
- ☐ What about the infrastructure? If it is Wi-Fi based, how are the Internet connections?

For example, a staff member may use a platform to assess balance, but the resident is being impacted by the information it produces. The staff member needs to know how to use the equipment and correctly interpret the data it produces. The resident needs to know that the assessment will help improve balance (outcome), which will enable her to join friends in the walking club.

6. Outcomes
Which results help residents, staff and customers and align with business needs?

Outcomes measure the results of the well-tech. Outcomes are collected periodically to show trends over time. What numbers will indicate how the technology performed?

- ☐ What results align with operations?
- ☐ What data shows the value of wellness?
- ☐ How often will you check the results?
- ☐ What data do you currently have that doesn't relate to the well-tech vision or to department and organizational objectives?
- ☐ Are staff members trained to recognize valuable data and use it?

For example, occupancy and length of stay are key metrics communities use. Data from well-tech can measure participation, satisfaction, number of referrals and changes in health or fitness status. All of these link to higher levels of occupancy and longer lengths of stay. Participation and satisfaction data can be used to update current programs and services or add new offerings.

Outcomes are tools to show the impact of wellness	
Outcome *Measurable, objective short-term result; what happened at the point in time*	**Impact** *Long-term effect; on a larger scale a picture of what was achieved*
Participation in physical activity	Length of stay, fall risk reduction
Participation in arts, cultural activities	Resident satisfaction
Frequency of participation = engagement	Resident and customer satisfaction
No. of move-ins/move-outs	Occupancy
No. of ER and hospital visits	Cost reduction, increased health span
Quality of life scores	Length of stay, referrals
Decrease in care plan needs	Labor and cost reduction, reduced move-outs
Staff satisfaction rating	Recruitment, reduced turnover
Staff efficiency rating	Engagement, cost control
Resident satisfaction rating	Referrals, occupancy
Growth in supplemental areas	Revenue
Family satisfaction	Return on investment, resident satisfaction
Well-tech as market differentiator	Marketing advantage

7. Criteria

What are the need-to-have and nice-to-have characteristics?

The criteria are the elements the well-tech team will use to judge the effectiveness and potential of equipment/data. The criteria keeps everyone on the same page and reins in sidetracks. Add or subtract criteria depending on your needs.

- ☐ Is the tech already in place? How well is it performing? Does it meet current needs?
- ☐ Is the tech aimed at administrators or staff or residents? How does criteria differ for each group?
- ☐ Is it directed by the user (Alexa or smartphone) or another person (staff, administrator)?
- ☐ What important elements are needed from the data output?

For example, well-tech that older adults use needs to be designed for people with vision or hearing loss, poor dexterity or mobility challenges. Speed of interface is a consideration. Have you ever scrolled down a menu that jumped or disappeared because it was set to move faster than your hand did?

MAP THE TECHNOLOGY *Continued*

A list of criteria[4,5,6] could include:

- Features that meet your requirements
- User-friendly operation and instruction
- Cultural and social fit
- Security and privacy protection
- Compliance with regulations, organization policies, legal restrictions
- Interoperability to connect with other technology tools
- Cost of the initial investment and down-the-road investments to maintain or upgrade
- Annual license or subscription costs, and rate of increase
- Support provided for troubleshooting, training, over what term
- Stability of company, partners
- Flexibility to change or adapt as technology evolves
- Data produced is useful for decision-making

8. Choose

Which technologies promise to meet a need, advance an opportunity or generate useful data?

Select the technologies that are more likely to meet a need or create an opportunity. That might be a tech already in place in one department that has a module that could aid another department. Or, it could be something new. Or, maybe it's a platform that will integrate and analyze data from multiple sources.

- ☐ Which of the technologies has the most potential to realize the well-tech vision?
- ☐ What tech would provide the data that can be used for decision-making?
- ☐ How will the tech be supported?
- ☐ Is it a short-term novelty or will it be used over years?

Everyone who will use the technology needs to handle it, see it, touch it. That is important for adoption. Gather the users in your well-tech team and play with an example. The input from the people who will use the technology builds the use case, which maps out how people interact with the technology, how it fits in workflows and how effective it is in meeting the criteria.[7,8]

A scorecard helps to keep track of the options. A simple A,B,C system of scores works. How does each option rate according to the criteria?

Well-tech scorecard

Criteria	Tech 1	Tech 2	Tech 3
User-friendly			
Features solve a need/opportunity			
Security, privacy			
Interoperability			
Initial cost			
Long-term cost			
Your criteria list			

9. Implement

How will the well-tech roll out and be sustained over time?

Before you begin to roll out a technology, draft the implementation plan. It will start at the end (what you expect to happen) and work backwards to make sure everything is in place. The implementation plan works with readiness to make sure all the points are covered.

- ☐ How well does the implementation plan match the organization's readiness?
- ☐ Who needs to be involved?
- ☐ Who will write the implementation plan?
- ☐ Who approves the plan?
- ☐ What person/position is responsible for monitoring results and encouraging adoption?

A small-scale pilot project is one way to examine how well a new technology works and how feasible it is to fully implement. A pilot allows your organization/people and the tech company's organization/people to agree on a long-term working relationship.

For example, technology adoption and staff burden are top concerns of wellness leaders. A pilot may not scale if the potential users are not included in decision-making, educating, planning and delivering. Enabling users at all skill levels to figure out the best way it works for them is a key factor that will help scale the rollout from a pilot or test to the entire company.[9]

Through the implementation period, champions must constantly explain the "why." Why was this technology chosen, why will it have value, why it will help.

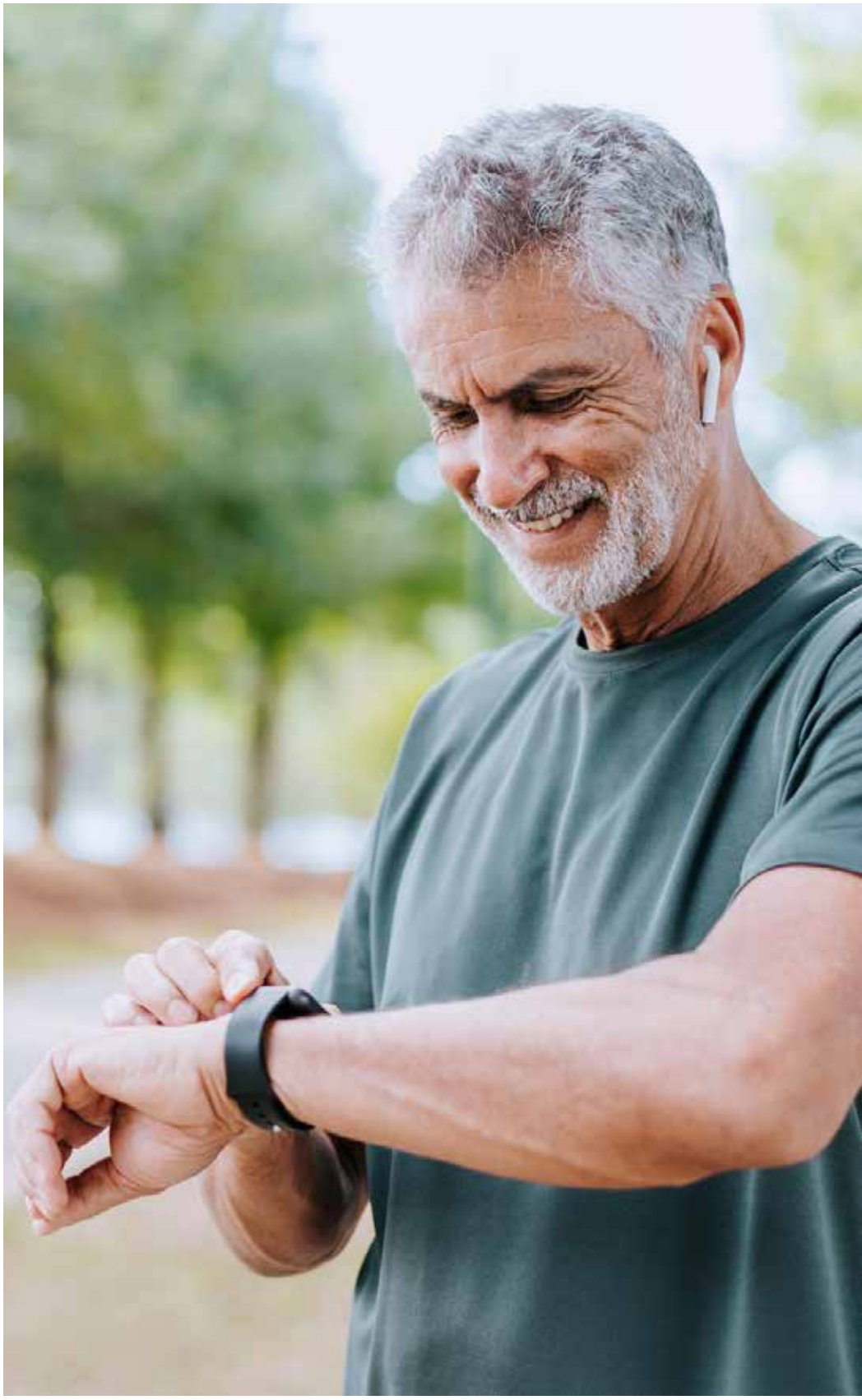
10. Evaluate

What happened during the well-tech implementation?

Evaluations assess the effectiveness of a program in producing change. What are the results? How do these compare to what was expected? A single data point isn't informative, data trends over time are.

- ☐ Was the technology able to cross functions? How well was it adopted?
- ☐ Has the tech company been a good partner in training and troubleshooting?
- ☐ How much is the tech being used?
- ☐ Did utilization drop off after a few months?
- ☐ Are the champions being encouraged and rewarded?
- ☐ Are challenges being surfaced and addressed?
- ☐ Does it perform as promised?

For example, you discover that the technology is not being used at the level expected. People said they would use it, but did not. Ask them what the issue was. Is it a hardware/software problem that can be fixed or a lack of training? Does using it take up too much time, or not save time? Uncover the challenge and you know your next steps.



TECHNOLOGY PARTNERSHIPS

What do senior living providers look for in technology?

"How can I bring in new technology to my facility, in a way that drives revenue and value?"

At either end of the technology are the organizations providing services for older adults and the companies that have technology. While they have mutual interests—using technology to solve business problems or meet needs—each has a different point of view.

What do senior living community decision-makers want companies to know? Forum colleagues told us.

> "How familiar are you with our business? Who will your product benefit? Why? A product/service that was built to serve another industry may not work for senior living or senior services."
>
> "How will your technology interface with others for interoperability? There is already a lot of technology in senior living and the big challenge is getting the data each generates collected into a single pool so it can be analyzed. We can't always bring in a technology that does not interface with others."
>
> "What is your commitment to us? We are looking for long-term relationships and a willingness to spend time with us to train users, troubleshoot, provide ongoing support and answer phone calls. We prefer a steady, reliable point of contact over years rather than a sequence of salespeople who are here today and gone tomorrow."
>
> "What is the return on investment in relation to our business? Can you share the results other companies have realized, or an outcome you can commit to? How was the adoption at other places, what were the challenges and how can these be overcome?"
>
> "We get several calls a day from companies that want to sell us their equipment, software or service. Salespeople should assume we already are familiar with the product and their competitors. What is the gap in the market your product is filling?"
>
> "What is the life cycle of this product? We don't want to bring in a product that is obsolete in a couple years or that requires constantly paying for updates or add-ons to make it work."
>
> "How will costs change over the years? Price transparency is needed to determine the financial outlay over the long-term. Will regular updates be needed at a cost; how much will subscriptions increase at what interval?"

What if we are partners?

What if… the start of the conversation was, how do our missions and values align? Are we aligned enough in terms of our needs and objectives to be long-term partners or to co-create something? An alignment requires us to think very differently about what we put in and what we get out.

What if… we created the value proposition together? How can we work together to create a product that works for both of us? A partnership rather that strictly a seller-buyer relationship.

What if… we agreed to operational and financial outcomes that we both commit to? As part of a strategic partnership with agreed upon responsibilities, milestones and results? If these are not met, what can we each do to meet the goals?

What if… we had a system to pilot a product and report back to you what was successful and what wasn't? You could use the information in product development, and we would gain an improved product. Everybody wins.

FORGING THE FUTURE

Keep pace with the outside world

"Last year, 58 million people visited Disney parks, with an estimated 17 billion dollars in revenue. Nobody is forcing them to go to Disneyland. They are going there because the Disney Imagineers designed the spaces to attract people. You can fix the ventilation till doomsday, but that's not going to make people go to a space and live in a space if it's not a well-being space that incorporates all seven domains of integrative health (resilience, environment, movement, relationships, spirituality, nutrition, sleep)."
-- Esther Sternberg, MD

Technologies are already embedded in the life of residents, staff and administrators. The pandemic-related technology jumpstart means that residents as well as staff members often are adept at using smartphones, touchscreens and voice-activated assistants.

Technology is now an expectation. Internet connectivity in the places where they live is very important, said 72% of the 50+ adults answering an ICAA/Age of Majority Survey.[10] A separate survey of people 55 years and older found they were using artificial intelligence, perhaps without knowing it. Three-quarters (74%) said they use GPS or location trackers, 63% digital assistants and 56% use a text editor or autocorrect.[11]

Older adults are not against using technology, but they do want it to have value, be easy to use and respect their privacy.[12] That's the same desire of the leadership and staff in senior living and aging services. What will bring value given the needs of different services and programs?

Craft the value proposition

"Who defines value? What's a value-based outcomes for the organization, for the residents, for the family member who may be paying for the service? Who gets to tell us that what we're measuring shows the value they are looking for?"

Going forward, the financial officers in a Ziegler roundtable reported that in 2023 they would continue investing in high-speed Internet and wired/wireless infrastructure (37%), resident/client access to the Internet and social networking (26%) and technical support for residents (26%). But they also planned to invest in new technologies, including data analytics tools with dashboards/decision support (31%) and physical robots (26%).[1]

This investment in data analytical tools and robots is a snapshot of how organizations are working to pull data from so many sources into a single, usable unit for decision-making. There is only so much money available to spend, and so many priorities. These tools are intended to bring value by aiding decision-making and helping staff members in a time of shortages.

If more data is available and organized in a way that makes it useful, staff members also need technology skills to analyze it. That need is supported by respondents to a global survey that found technology skills (72%) are equal in importance to engagement skills (72%) for the workforce in Care, Personal Services and Wellbeing industries (2023-2027).[13] Around the world, staff development in technology is notching up to a high priority.

Wellness is a value creator in the short- and long-term. In addition to the outcomes and impacts listed earlier, wellness is a factor driving demand for senior living. The National Investment Center points out that the culture, social interaction and emphasis on healthy active lifestyles, along with hospitality services, (all of these are wellness) are attracting people to the industry. A bonus is that healthier lifestyles have the potential to increase length of stay.[14]

Senior living and community services share the same need that companies with technology or technology-enabled equipment have. Both need to make enough money to cover expenses. While their products and business objectives may differ, collaboration between the two groups could benefit both. Collaboration is a long-term strategy. But then so is the desired lifespan of the business.

As the next iteration of senior living evolves, operators, funders and investors are looking for data to manage efficiencies and predict the services and amenities that will be needed when their target population shifts to the boomers. By bringing in new technologies that meet a need or advance an opportunity, the opportunity looms large to prove the value of person-centered wellness as a pillar of a sustainable financial model.

ICAA WELL-TECH FORUM ADDDENDUM

Thought leaders

S. Jay Olshansky, PhD, professor of epidemiology and biostatistics at the University of Illinois at Chicago, focuses his research on estimates of the upper limits to human longevity, exploring the health and public policy implications associated with individual and population aging.

Esther Sternberg, MD, a pioneer in collaborative initiatives on mind-body-stress-wellness and environment interrelationships, is director of research at the Andrew Weil Center for Integrative Medicine and founding director of the Institute on Place, Wellbeing & Performance, both at the University of Arizona.

Delegates at the ICAA Forum. The anonymous quotations included in this report were gathered from unpublished emails replying to a query from ICAA asking about the top concerns providers in senior living face when evaluating technology, and the top questions equipment, service and technology sponsors are asked. Additional quotations were gathered from a transcript of statements made during the ICAA Forum.

Resources

Vision

Aging, Second Edition: Geroscience as the New Public Health Frontier
Edited by James L. Kirkland, S. Jay Olshansky, George M. Martin
Cold Spring Harbor Laboratory Press
https://www.cshlpress.com/default.tpl?action=full&cart=1698131042181542529&--eqskudatarq=1388&typ=ps&newtitle=Aging%2C%20Second%20Edition%3A%20Geroscience%20as%20the%20New%20Public%20Health%20Frontier

An integrative health framework for wellbeing in the built environment
Building and Environment
Volume 205, November 2021
https://www.sciencedirect.com/science/article/abs/pii/S0360132321006533

Future-proof your senior living community
International Council on Active Aging
Models of built and unbuilt environments, culture, workforce, technology
https://www.icaa.cc/conferenceandevents/forums/reports/2020_11.pdf

Person-centered wellness is the key to the future
International Council on Active Aging
Leveraging technology, programs, staffing, funding and the built environment.
https://www.icaa.cc/conferenceandevents/forums/reports/2023_06_future.pdf

Planning

Digital Transformation in Aging Services
LeadingAge
https://leadingage.org/digital-transformation-in-aging-services/#App6.3

Funding the new wellness model in senior living
International Council on Active Aging
https://www.icaa.cc/conferenceandevents/forums/forumreports.htm

Resident/Client Technology Support and Training Whitepaper
LeadingAge
https://leadingage.org/resident-client-technology-support-and-training-whitepaper/#1

The future of technology for active aging
International Council on Active Aging
https://www.icaa.cc/conferenceandevents/forums/forumreports.htm

Application

Well at Work: Creating Wellbeing in Any Workspace
Esther Sternberg, MD
https://esthersternberg.com/books-publications/

Wellbuilt for Wellbeing
US General Services Administration
https://www.gsa.gov/governmentwide-initiatives/federal-highperformance-green-buildings/resource-library/health/wellbuilt-for-wellbeing

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ICAA WELL-TECH TOOLKIT

Well-tech implementation checklist

Preparation, Audit, Readiness

PREPARATION	
	IT leader consulted and engaged in process
	Well-tech team selected
	IT strategy and roadmap reviewed
	Staff level of tech literacy assessed
	Staff strengths, gaps, opportunities identified
	Leadership strengths, gaps, opportunities identified
	Partner and payor views collected
	Wellness industry trends reviewed
	Senior living industry trends reviewed
AUDIT	
	Tech currently in place in all departments collected
	Staff, residents, family members surveyed for views on gaps, misconceptions
	Current spaces assessed
	Infrastructure capacity assessed, e.g. Wi-Fi network
	Resident level of tech literacy assessed
	Workflow assessed for method to integrate recommended well-tech
	Staff ability to implement a well-tech in addition to current jobs assessed
	Identify resident wants and concerns
	Identify needs, wants and concerns in operations
	Detail limitations and obstacles
	Assess resources available for support and training

READINESS	
	Leadership misconceptions about wellness addressed
	Challenges are listed and planned for
	Gaps/opportunities well-tech could fill identified
	Cost is identified and related to return
	Caregivers, family and contractors part of well-tech advisory groups
	Buy-in from leadership realized
	Buy-in from residents accomplished
	Buy-in from resident family members achieved
	Implementation plan in place
	Wellness objectives defined
	Well-tech team sets baseline to benchmark outcomes
	Champions and peer mentors recruited
	Advocates for change and adoption identified in each area of touch
	Interoperability of recommended well-tech assessed
	Spaces and infrastructure remodeled for recommended well-tech
	Beta test or pilot is developed and prepared
	Beta test or pilot conducted and evaluated
	HIPAA protocols and security systems operational
	Promotion and explanations developed for varied learning styles
	Coaching and support for using well-tech in place
	Data analysis training contracted and budgeted

ICAA WELL-TECH TOOLKIT *Continued*

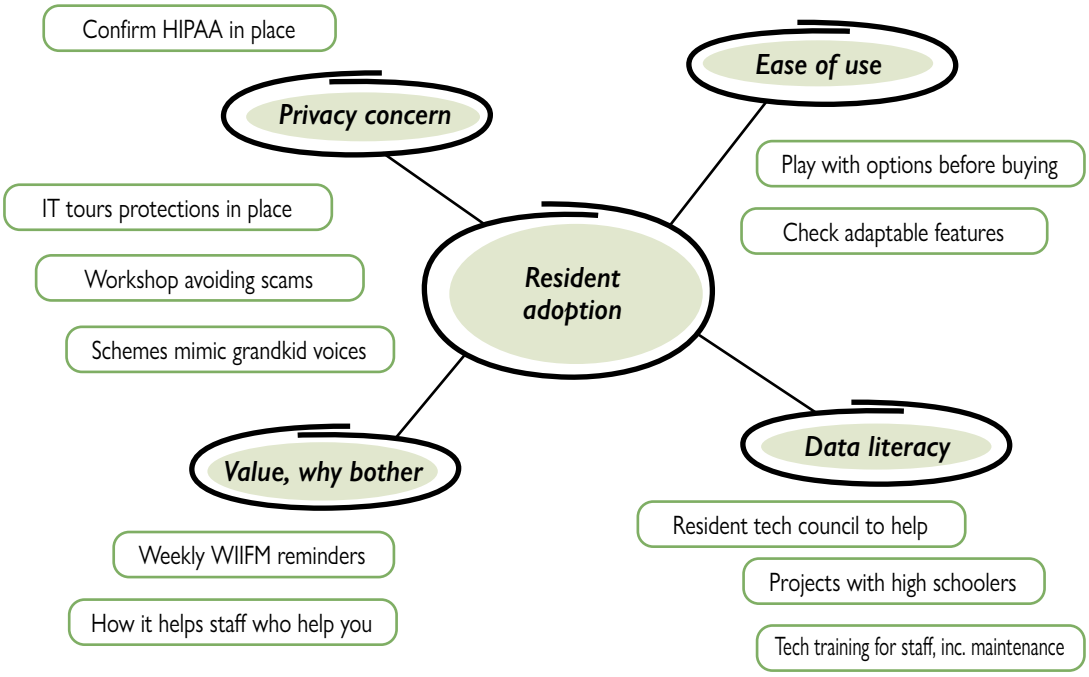
Well-tech implementation checklist

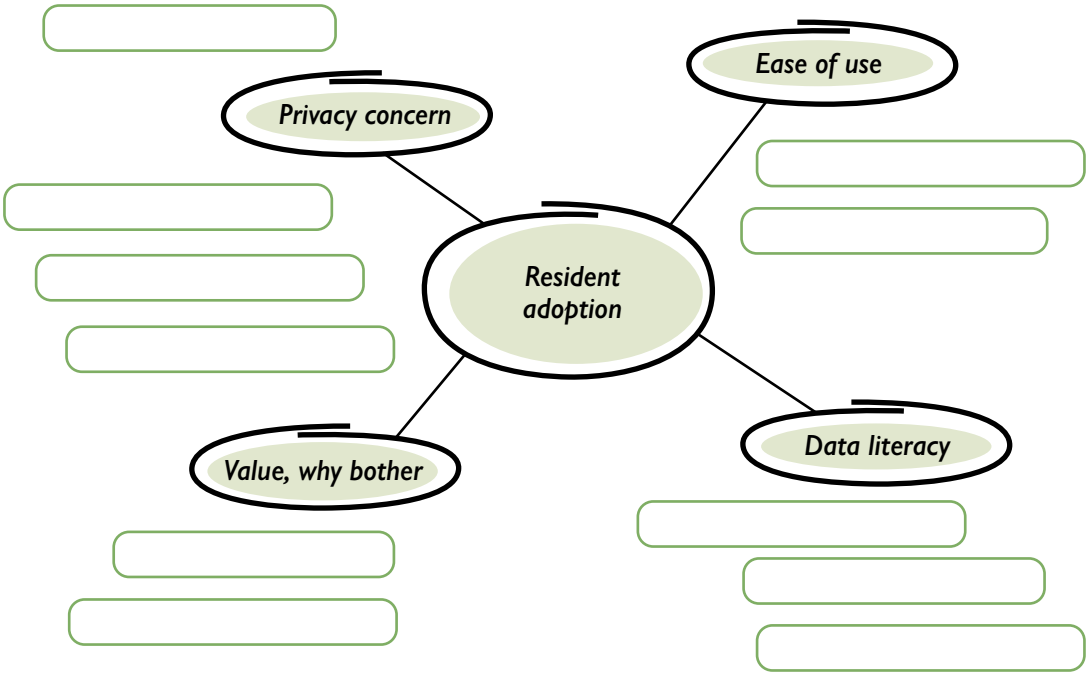
Adoption, Sustainability

ADOPTION	
	Potential users try equipment, advise on utility and usability
	Ease of use assessed
	Potential users part of the design and decision-making
	Regulations and requirements detailed and reviewed for recommended well-tech
	Rationale for selecting the technology and why it is being implemented shared
	Leadership recruited to promote value of well-tech
	Small wins collected and publicized
	Well-tech is introduced in relation to familiar tools, with reassurance
	Using well-tech is integrated into everyday culture
	Clear path and timeline for all to engage and learn at any stage
	New users can be welcomed at any time, not only at rollout
	New users can adopt at step 1 or at step 7
	Tech literacy being addressed across the product life
	Resident champions rewarded for adopting and sharing the value
	Family champions encouraged to adopt and share value
	Champions and peer members celebrated
	Common language for technology used for explanations, decision-making
	Rollout monitored and challenges addressed
	Challenges and successes exchanged among sites, partners, teams
SUSTAIN	
	Reiterate an ongoing focus on the WHY
	Repeat surveys at intervals
	Maintain support over the life of the product
	Gather data and compare to past
	Gather data and integrate with data from other departments and functions
	Identify changes revealed through data
	Determine if objectives met
	Frequency of utilization over time
	Number of users compared over time

Resident adoption mind map and priority matrix

1. Brainstorm possible solutions. A mind map is one approach.





ICAA WELL-TECH TOOLKIT *Continued*

Resident adoption mind map and priority matrix

2. Rank each solution. Is it important for resident adoption? Can it be implemented? How well? Does rank change short-term or long-term?

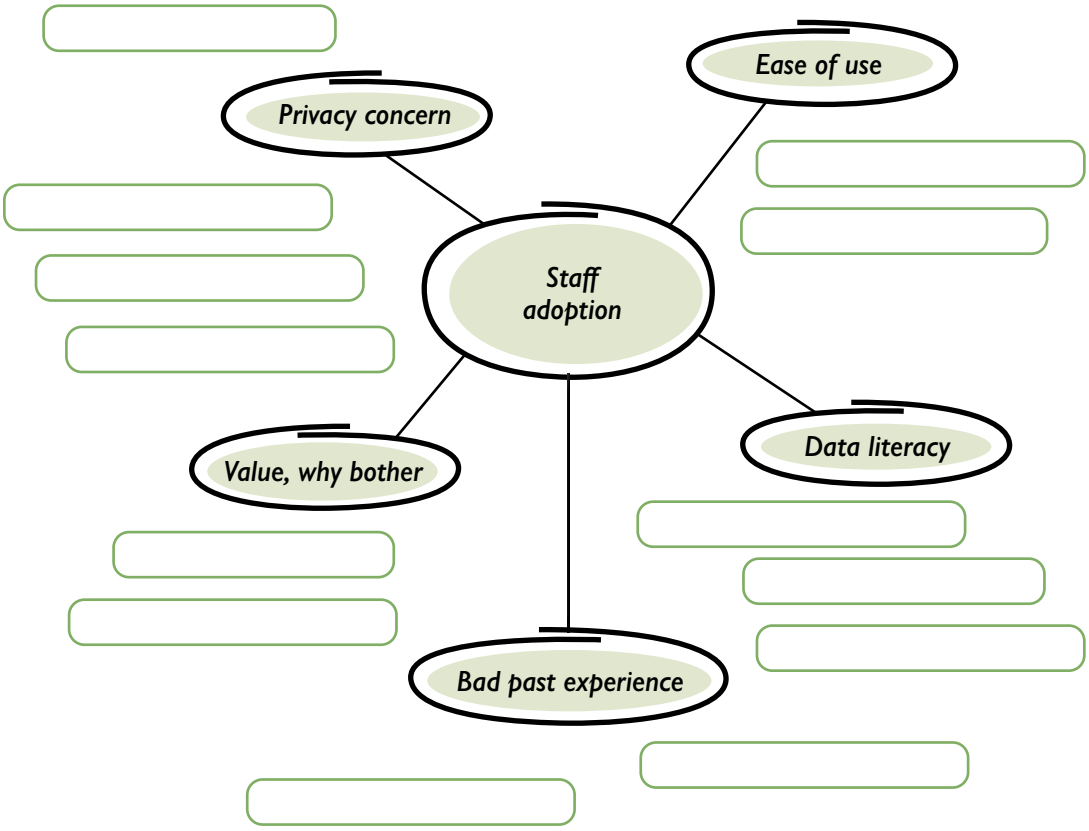
EXAMPLE ONLY!!

Issue	Possible solutions	Important for adoption	Can be implemented (performance)
Privacy concerns	1. HIPAA in place	H	H
	2. IT shares how they secure data	H	H
	3. Workshop on avoiding scams	L	H
	4. Your idea		
Value, don't need it	5. Explain why	H	L
	6. How it helps staff	H	L
	7. Evaluate workload	L	L
	8. Your idea		
Ease of use, hard to see	9. Check adaptability features	H	H
	10. User tests before buying	H	L
	11. Your idea		
	12. Your idea		
Literacy, don't know how	13. Resident tech council to help	L	H
	14. Ask students to do joint projects	L	L
	15. Group training	H	L

Importance		
	High importance Low performance **Improve here** 5 6 10 15	High importance High performance **Prioritize these** 1 2 9
	Low importance Low performance **Low priority** 7 14	Low importance High performance **Midlevel or no priority** 3 13
	Low → **Performance** → High	

Staff adoption mind map and priority matrix

1. Brainstorm possible solutions. A mind map is one approach.



Staff adoption mind map and priority matrix

2. Rank each solution. Is it important for staff adoption? Can it be implemented? How well? Does rank change short-term or long-term?

Issue	Possible solutions	Important for adoption	Can be implemented (performance)
Workload, already overwhelmed	1.		
	2.		
	3.		
Value, why bother	4.		
	5.		
	6.		
Ease of use	7.		
	8.		
	9.		
Data literacy	10.		
	11.		
	12.		
Bad past experience	13.		
	14.		
	15.		

Importance ↑	High importance Low performance **Improve here**	High importance High performance **Prioritize these**
	Low importance Low performance **Low priority**	Low importance High performance **Midlevel or no priority**
	Low → **Performance** → High	

Checklist for evaluating technology

Evaluated	Element	
		Discovery phase
	Focus groups	Include staff, residents and family members to discover what the issues are and what might help solve them. Seat cross-functional teams from operations, wellness, dining, clinical and other areas. These groups can identify features or characteristics that will be important, and may not emerge otherwise.
		Evaluation phase
	Need	Does the technology fill a need that has been identified, or may arise?
	Connectivity	What wired, wireless or Internet infrastructure is needed? Is the facility able to support the connections?
	Hardware	What hardware is needed to efficiently use the system? What screens, input devices, computers, kiosks and connections are required?
	Interoperability	Can the system communicate with other systems? Or, is it enterprise capable so multiple modules can share information?
	Lifespan	Is the technology a legacy product that will not be upgraded, or are there plans to improve on the system? Is the company developing new or similar products?
	Scalability	Can the system be scaled up for implementation in multiple sites? Or, are additional modules available?
	Adaptability	How well can the technology adapt to the users, or how well will users be able to adapt to the technology?
	Learning curve	How easy is it to learn to use the system? How is training provided? How long does it take for users to become expert, and how often will skills be refreshed?
	Usability	Is the Graphic User Interface (GUI) simple and easy to understand? Are the steps to move from screen to screen clear? Does the text make sense? Can tasks be performed efficiently?
	User experience	Has the technology been designed to take into account the users' needs, abilities and limitations? Will users appreciate the design and navigation?
	Monitoring	Does the technology have built-in tools to monitor how the system is used or accessed?
	Ownership	Who owns the data? The technology developer or the organization?
	Security	How is the data protected to insure privacy? Who has access to that data?
	Standard	Is the software built to a standard, such as those provided by the International Organization for Standardization (ISO)?
	Comparison	How does the technology compare with other similar technology solutions?

Checklist for evaluating technology *Continued*

Evaluated	Element	
		Evaluation phase
	Roadmap	Will the technology be a tool to implement the business strategies and fit within the technology roadmap?
	ROI	Is there a business case for using the technology with a reasonable time frame for the return on investment?
		Pilot phase
	Champion	Select a champion who explains the benefits of the technology, relays confidence in the system and follows the progress of the pilot.
	User group	Select a small group of people who will give feedback on effectiveness, usability and functioning.
	Tracking	Track how long it takes users to learn the system; identify the areas of confusion.
	Measurement	Establish in advance how the results of the pilot will be measured. What results are needed to show the pilot was successful?

NOTES

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