HCAI Department of Health Care Access and Information

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Hospital Building Safety Board
Technology and Research Committee

Thursday June 20, 2024
10:00 a.m. – 4:00 p.m.

Locations: 2020 West El Camino Ave, Conference Room 930, Sacramento, CA 95833
355 South Grand Avenue, Conference Room 2000, Los Angeles, CA 90071

Committee Members Present	**HCAI Staff Present**
Gary Dunger, Chair	Chris Tokas
Cody Bartley, Vice Chair	Arash Altoontash
Jennifer Cox	Larry Enright
Teresa Endres	Andia Farzaneh
Michael Foulkes	Joe LaBrie
Bert Hurlbut	Carl Scheuerman
Scott Mackey	Nanci Timmins
Michael O'Connor	Larry Enright

HBSB Staff Present
Veronica Yuke, Acting Executive Director
Marcus Palmer

1 **1. Call to Order and Welcome**

2 **Facilitator:** Gary Dunger, Executive Director, Design and Construction, Cedars-Sinai
3 Health System; Committee Chair

4 Gary Dunger called the meeting to order and welcomed attendees to the Hospital
5 Building Safety Board Technology and Research Committee session.

2. Roll Call and Meeting Advisories/Expectations

Facilitator: Veronica Yuke, Supervisor, HCAI; Acting Executive Director

Veronica Yuke conducted the roll call, confirmed a quorum, and outlined meeting expectations.

Gary Dunger announced that agenda item 4, Presentation: Healthcare Microgrids, would not be discussed during the meeting due to Jamie Schnick's absence.

3. Presentation: Cedars-Sinai Marina Del Rey Replacement Hospital Technology Program

Facilitators: Alicia Wachtell, Executive Director, and Rudy Perez, Executive Director, Cedars-Sinai Facilities Planning, Design and Construction

The presentation reviewed the development process for the technology program at the Marina Del Rey Replacement Hospital, highlighting the integrated structure of workgroups involving enterprise leadership and subject matter experts. Key themes included the importance of guiding principles, research on emerging technologies, and the phased approach to implementing new systems. Rudy Perez emphasized the commitment to leveraging existing systems and ensuring consistent experiences across the health system.

Key Points of the Presentation:
- Technology guiding principles set the context for decision-making, focusing on digital-first patient experiences, enhanced care journeys, and operational efficiencies.
- Research included consultations with peers and vendor partners, emphasizing the need for futureproofing the hospital's technology.
- The technology program is structured in phases:
    - Phase one prioritizes technologies with significant infrastructure impacts.
    - Phase two focuses on defining workflows and clinical pathways with fewer infrastructure requirements.
- Implementation involves a multi-tier process of identifying, prioritizing, and gaining feedback on new technologies.
- Example technologies being implemented include virtual nursing, centralized patient flow command centers, and smart beds.
- Emphasis on developing the plan early and defining key decision-makers to ensure efficient and practical use of technology.
- The presentation underscored the importance of balancing technology robustness with operational efficiency to avoid overcomplication.

Committee Comments

- **Gary Dunger** inquired about the room identifiers, discussing the considerations regarding their compliance with HIPAA and accessibility requirements. Rudy Perez explained that the main challenge is finding the correct height for monitors. Lower placement impacts visibility, and while these monitors can be touchscreen and lockable, the issue has not been resolved yet as they are still working to meet all code and regulations. Gary Dunger also expressed appreciation for Rudy's informative presentation.

- **Teresa Endres** asked whether the Real-Time Locating System (RTLS) is used for data analytics beyond asset tracking and staff alarms, including hand hygiene compliance and operational efficiencies. She also inquired about HIPAA privacy concerns related to nurse documentation, ambulance listening, and voice recognition in patient rooms. Rudy Perez confirmed that they purchased the hand hygiene functionality and need to check with the nurse call group for additional analytics. Regarding HIPAA privacy, he assured that the system is turned off until activated by a smartphone app, with a light indicating when the speaker is on. Teresa Endres also requested a follow-up on the specific uses of robotics at Cedars-Sinai Marina Del Rey. Rudy Perez agreed to update Gary on the uses of robotics for tasks like delivering supplies or handling soiled materials.

- **Jennifer Cox** followed up on Teresa's question about the hand hygiene tracking system, asking for the product used and any challenges faced with staff compliance. She also questioned the size of the door display monitors, their visibility for staff, and the compatibility of devices with disinfectants. Rudy Perez identified the hand hygiene system as Hillrom integrated with Sonotron RTLS, noting it is not yet operational for staff compliance feedback. He mentioned testing an 11x8 inch monitor, which should be sufficient, and confirmed ongoing analysis for compatibility with current and additional disinfectants.

- **Carl Scheuerman** asked if the system coordinates care delivery to avoid wasted provider time when patients are not in their rooms. He also inquired about discussions with the California Department of Public Health (CDPH) regarding the view of virtual nursing as a supplement to physical nursing. Rudy Perez stated they are working to ensure care is provided where the patient is, enhancing RTLS to eliminate wasted time. He needed to follow up with the technology team to confirm discussions held with CDPH about virtual nursing.

- **Michael O'Connor** asked whether future robotics were considered in the technology evaluation. Rudy Perez mentioned that robotics is being discussed but not yet implemented, as the technology group is still evaluating potential impacts.

- **Nanci Timmins** asked about encountering advanced fire alarm technology during their research and the backup systems in place to handle technology failures like cyber-attacks. Rudy Perez mentioned not encountering advanced fire alarm technology but acknowledged its importance. He confirmed robust backup systems

with three data centers and cloud-based solutions, reverting to paper charting and manual processes in case of failure.

4. Technology and Research Committee Goals for 2024

Facilitator: Gary Dunger

Previous Goals (2021):

- Explore subjects of telemedicine and robotics
- Discuss the effect of technologies on healthcare equity
- Monitor CDPH electronic health records redundancy issues in the event of power failure and watch for potential effects to code
- Emerging tools
  - Technologies that help reduce the carbon footprint for healthcare facilities and implementation relative to code implementation of emerging tools relative to the code.

Current Goals:

- Explore subjects of telemedicine and robotics
- Discuss the effect of technologies on healthcare equity
- Explore emerging technologies that help reduce the carbon footprint for healthcare facilities and implementation relative to code implementation of emerging tools relative to the code.
- Address how to regulate remote services (e.g., medical records, web-based nurse call, off-site server farms, etc.)
  - Define what is a medical record
  - Monitor CDPH electronic health records redundancy issues in the event of power failure and watch for potential effects to code
  - Invite industry members to address/inform the committee on the reliability of cloud-based systems (fire alarm, energy monitoring, etc.)
- Explore wastewater solutions

Discussion Highlights:

- **Telemedicine and Robotics:**

  - **Jennifer Cox:** Asked about operationalizing the goal of exploring telemedicine and robotics.

1   o **Gary Dunger:** Explained the construction-specific aspects of telemedicine
2   and robotics, such as room setup for telemedicine and robotic recharging
3   stations.
4   o **Jennifer Cox:** Suggested measuring success through presentations and
5   documentation.
6   o **Teresa Endres:** Proposed documenting telemedicine implementations in a
7   white paper to benchmark and track usage.
8   o **Michael O'Connor:** Emphasized identifying and removing barriers in building
9   codes that inhibit the adoption of modern technologies.

10 • **Effect of Technologies on Healthcare Equity:**

11   o **Scott Mackey:** Questioned the meaning and relevance of this goal to the
12   committee's work.
13   o **Teresa Endres:** Explained that telemedicine could help underserved
14   communities access healthcare and suggested leveraging HCAI's data
15   collection to measure gaps in access.
16   o **Jennifer Cox:** Agreed and highlighted the importance of considering social
17   determinants of health.
18   o **Belinda Young:** Confirmed that the intent was to address healthcare access
19   disparities through technology.
20   o **Chris Tokas:** Stressed the importance of discussing these issues publicly to
21   raise awareness and promote best practices.
22   o **Scott Mackey:** Proposed defining healthcare equity more precisely to guide
23   the committee's work.

24 • **Emerging Technologies to Reduce Carbon Footprint:**

25   o **Gary Dunger:** Shared examples like the City of Los Angeles's ordinance
26   against natural gas in new buildings and Cedars-Sinai's all-electric new
27   medical center.
28   o **Nanci Timmins:** Suggested monitoring 3D printing in construction and
29   participating in relevant committees to stay ahead of industry changes.
30   o **Chris Tokas:** Highlighted the importance of addressing decarbonization and
31   sustainability in healthcare construction.
32   o **Scott Mackey:** Noted the connection between reducing carbon footprints and
33   addressing healthcare inequities and proposed creating a comprehensive
34   definition of healthcare equity to guide the committee's efforts.

35 • **Regulating Remote Services (e.g., medical records, web-based nurse call,**
36   **off-site server farms):**

- **Gary Dunger**: Emphasized the need to define what constitutes a medical record and ensure proper storage in compliance with the code. Highlighted the importance of monitoring CDPH electronic health records redundancy issues and addressing the reliability of cloud-based systems.
- **Scott Mackey**: Agreed with the need to include cybersecurity, mentioning the impact of cyber threats and attacks on facilities. He suggested bringing in cybersecurity experts for recommendations and standards establishment.
- **Teresa Endres**: Inquired about the regulating bodies for web-based services and the availability of data on facilities affected by cyberattacks.
- **Chris Tokas**: Highlighted the need to define boundaries and redundancies to handle cyber threats and emphasized the role of CDPH in providing alternatives to full automation.
- **Michael O'Connor**: Discussed the importance of guidelines for cloud-based systems and the necessity of internet connection redundancy, especially for rural facilities. Supported the idea of a white paper to address these issues.

- **Exploring Wastewater Solutions**:

  - **Gary Dunger**: Introduced the topic but did not elaborate.
  - **Chris Tokas and Michael O'Connor**: Discussed the utilization of gray water in healthcare facilities for purposes like irrigation and flushing. Suggested this be a sub-bullet under environmental goals.

Additional Topics:

- **Artificial Intelligence (AI)**:

  - **Teresa Endres**: Proposed including AI in the committee's focus, mentioning its impact on healthcare and the importance of data analytics. Volunteered to present on RTLS.
  - **Michael O'Connor**: Acknowledged the significance of AI and suggested it be a discussion topic.

- **Cybersecurity Reporting**:

  - **Michael O'Connor**: Questioned if facilities are required to report cyberattacks to regulatory bodies and suggested including this in the white paper for better understanding and handling of such incidents.
  - **Jennifer Cox**: Clarified that facilities must report data breaches, especially those involving protected health information, to CDPH.

1 **5. Comments from the Public/Committee Members on Issues not on Agenda**

2 **Facilitators:** Gary Dunger

3 No comment.

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5 **6. Adjournment**

6 **Facilitators:** Gary Dunger

7 Gary Dunger adjourned the meeting, thanking everyone for their participation.

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