TeleCritical Care

Kaiser Permanente Northern California

June 2023

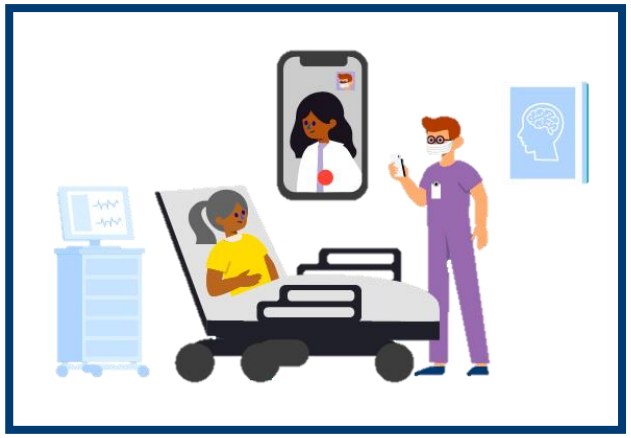
KAISER PERMANENTE® | TeleCritical Care

Kaiser Permanente's Telehealth Aspiration

Kaiser Permanente will define the standard of excellence for telehealth in the industry, delivering affordable, seamless, high-quality Permanente Medicine whenever and wherever members need it.

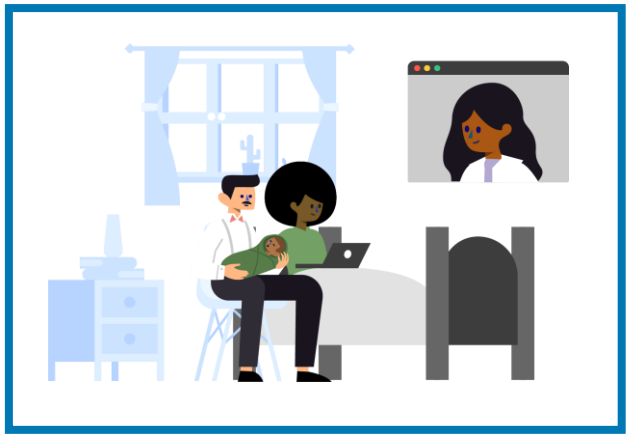
"CARING FOR YOU, WHEREVER YOU ARE"

IN A KP HOSPITAL ...



Rita can receive world-class care through 24/7 ICU patient remote monitoring, specialty teleconsultation and more, no matter the time of day or hospital location

IN THE HOME ...



Ray can receive acute hospital-level care for his conditions through home care and remote monitoring

OR ON THE GO.

Damian can keep a KP care team virtually by his side, even when traveling with a chronic condition. Video, chat, phone and more make it like he never even left home

Kaiser Permanente's Enterprise Telehealth Strategy includes three different spheres of virtual care – acute inpatient, care at home, and ambulatory care – in a single, coordinated program.

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What is TeleCritical Care?

*TeleCritical Care (TCC) is a **population management approach** to critical care that leverages a **remote monitoring software system** and **audio-visual communication** to link a team of intensivists and nurses in a remote support center to hospital ICUs.*

TCC Intensivists & RNs provide monitoring & remote consultation at TCC Hubs

Bi-directional audio-visual communication

Smart systems alert TCC clinicians to deteriorating patients

High-quality, consistent support to ICU patients and staff

TCC Mission & Vision

Mission

Statement

TCC provides immediate critical care expertise for our ICU patients by delivering rapid and early treatment in collaboration with local caregivers

Themes

- Patient Centered
- Early Detection
- Rapid Response
- Strong collaboration with local ICU teams

Vision

Superior outcomes, enhanced care experience, and cost efficiency for ICU patients by local ICU clinicians supported by a remote monitoring team.

- Better Patient Outcomes
- Better Care Experience
- Greater Efficiency
- TCC supports local teams and patients

TCC in Action | The TCC Hub in San Leandro

Epic Monitor Screen Configuration

Headset

Video Communication

Monitors

Workstation Camera

PC Model

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ICU Rooms with TeleCritical Care| Equipment to Know

High-quality patient care and safety relies on strong collaboration with providers with physician presence in ICUs

1. **Camera** allows TCC clinicians to interact with patients and staff in the ICU. TCC cameras are only on when fully rotated and you can see TCC clinicians on the monitor, Sessions are never recorded.

2. **Monitor** displays TCC clinicians live from remote support center hubs.

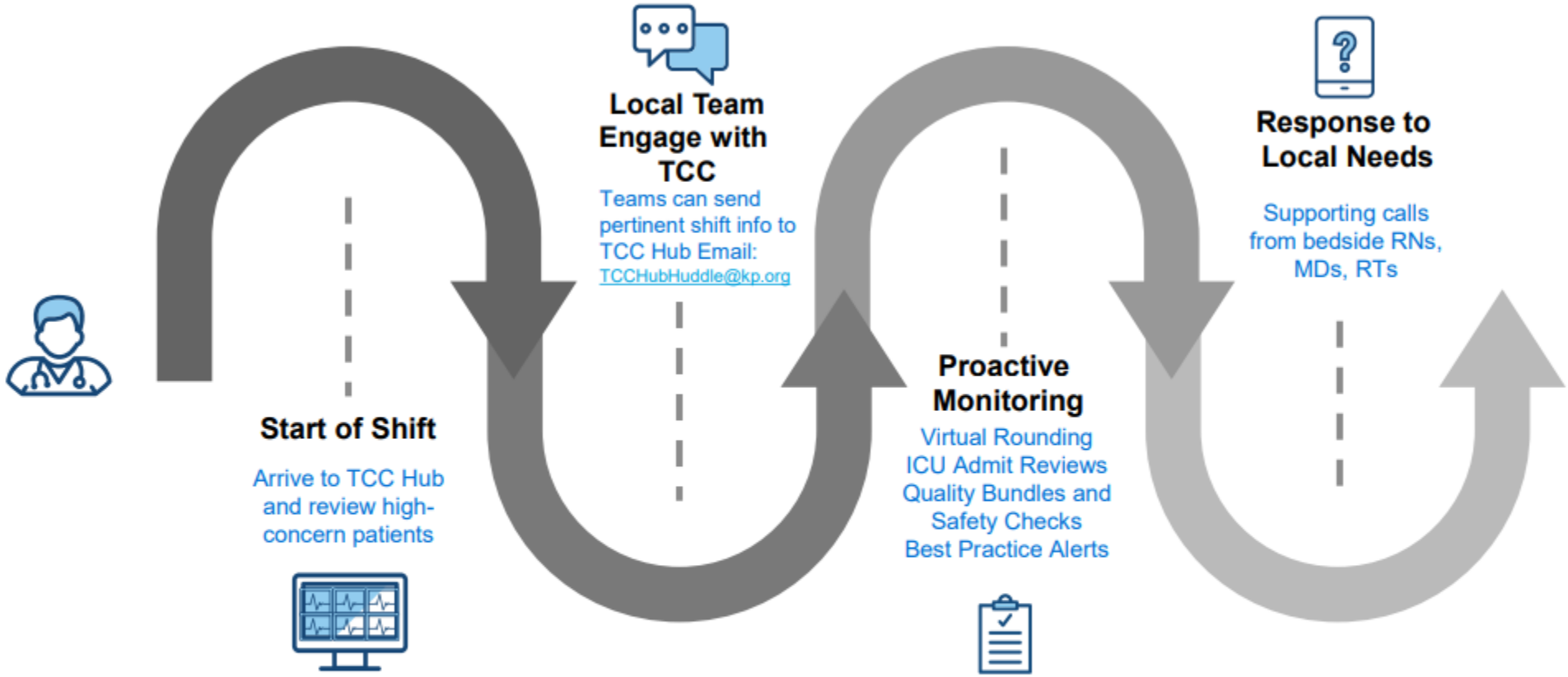
3. **Alert Button** for rapid response to emergency codes available at RCH, FRE, SLN and subsequent sites. <u>Local protocols still apply.</u>

Equipment is not functional until TCC is live at your facility.

Alert Button for rapid response to emergency codes only. Should be pressed <u>after</u> following local protocols.

TCC and Bedside Care Teams | Collaborative Workflow

TCC nurses and intensivists balance proactive workflows and rapid response to ICU needs throughout the night



- **For 24/7 in-house intensivist and teaching sites, use your local workflows.** TCC is still available for support when needed.
- Bedside care teams use **SBAR format and closed loop communication when calling TCC**.
- TCC nurses and intensivists balance **proactive workflows and rapid response to ICU needs** and calls for support.
- TCC nurses virtually round on patients nightly, reviewing **safety checks and quality bundles.**
- TCC clinicians **identify the most critically ill, highest need patients** through huddles with ANMs, virtual rounding, and smart systems.

Pilot Results | Statistically Significant Results from DOR Pilot Evaluation

Data from the SSC and ROS pilots indicate that there is a statistically and operationally significant impact from TCC.

Pilot Results

↓ mortality adjusted LOS

TCC reduces mortality adjusted length of stay[a] in the following ways:

- *Hospital LOS is reduced by **28.5 hrs***
- *Total ICU LOS is reduced by **13.9 hrs***
- *Non-boarder ICU LOS is reduced by 17.5 hrs*

Extrapolating the pilot results to NCAL wide, 7-day a week implementation

120-600 lives saved/year

*TCC reduced hospital mortality for patients with an ICU encounter **by 17%** at the pilot sites.*

13,000+ days saved / yr

Days Saved Per Year:

- ***16,080 - 35,760** hospital days*
- ***13,023 - 21,918** ICU days*

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[a] LOS results adjust for mortality by setting the LOS for patients who died to the 99th LOS percentile. This avoids giving shorter length of stay "credit" to deceased patients.
Analysis compared patients at TCC facilities from Sept 2019 – early March 2020 relative to the rest of the region. Days and lives saved assumes 30k ICU encounters per year.

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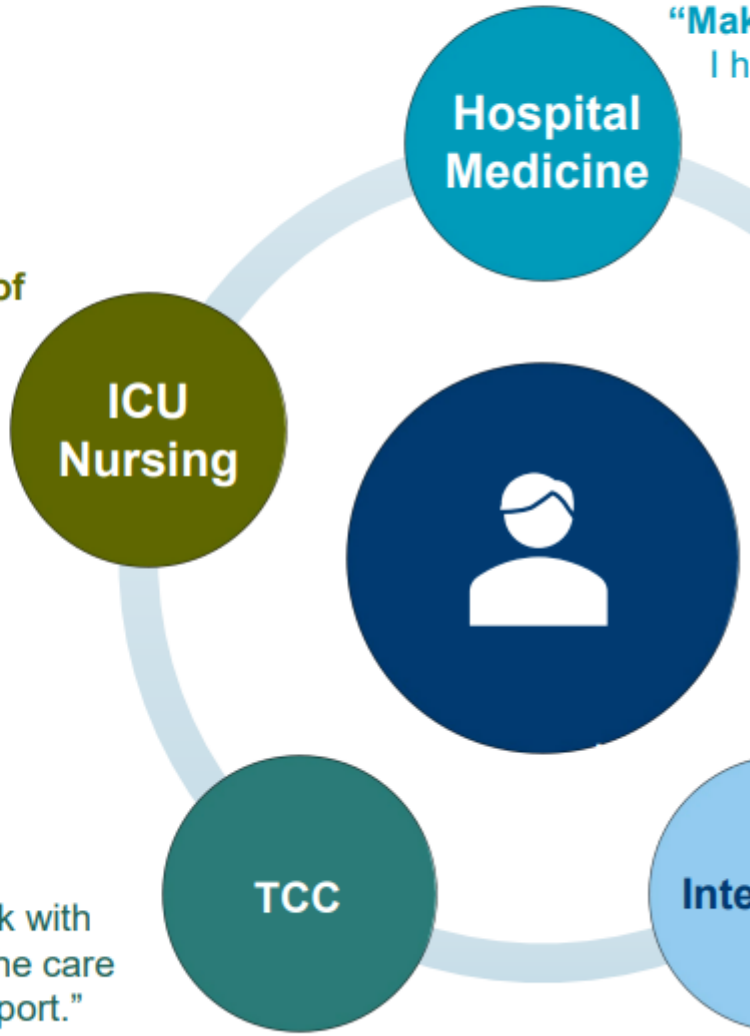
Qualitative Results | Medical Center Experience

Each team member contributes to patient outcomes through meaningful collaboration.



"Makes my job much smoother. I have additional support and **thought partnership** in managing patient care"

"**Patient needs are met in a timely** manner. TCC allows RTs to reach out and **get answers**."

"My patients are safe and receiving quality care."

"**You realize you are making a difference**. I enjoy everyone I work with and know we impact the care of the patients we support."

"It provides an **extra layer of help** and we can **reach out anytime** we need help."

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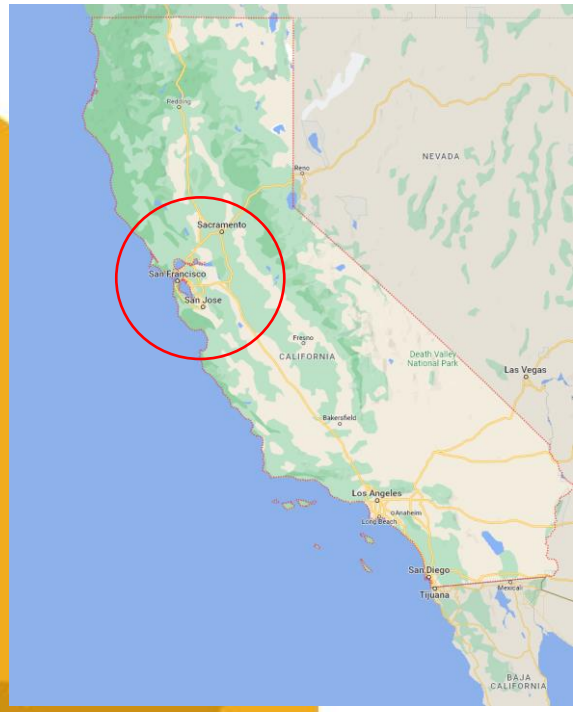
What's next for TeleCritical Care?

To expand the benefit of TeleCritical to all KP NCAL members, our program is pursuing region-wide spread in 2022



21 Hospitals

> 400 Beds

2 Hubs

7 nights / week

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