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Background

- Covid-19 needs no introduction

- Hospitals rapidly became learning health systems

- Large volume of patients → Shortage of hospital resources → virtual care

Background

Virtual care services can reduce:

ED presentations

Hospital admissions

VC services required fast-paced development and implementation of technologies to meet growing demand

Aim

To determine the environmental barriers and facilitators to fast-paced development and implementation of virtual care technologies

Methods

Study design: Qualitative

Setting: Virtual Hospital in Australia

Roles of interest: Clinical and non-clinical staff (n=8)

Average interview length = 57 minutes

Interview range = 32 to 93 minutes

Analysis: Thematic analysis using inductive coding by 2 researchers

Environmental facilitators

o   Availability of resources

o   Supportive organisational culture

o   Technologically-advanced environment

Environmental facilitators (1 of 2)

- Availability of resources

"There's obviously a lot of attention and money being thrown at this unit. And, you know, it doesn't go unnoticed by the staff that we do have the best of everything here to make that happen."

- Supportive organisational culture

"So everyone is working very collaboratively for things to be implemented efficiently, but also quickly …we got so used to it with the rapid changes with COVID. And we knew we had to adapt to the change very quickly."

Environmental facilitators (2 of 2)

- Technologically advanced environment

"…we've got our clinician to patient tools, like [app name], it gamifies your own care a little bit. So you can win prizes, gift vouchers and stuff through the app, as you complete the tasks required for your care."

Environmental barriers

o   Hot-desking without single sign on functionality

o   Challenging for clinicians to transition from brick-and-mortar to virtual environment

o   Legislation not keeping up with pace of change

o   Interoperability challenges

Environmental barriers (1 of 4)

• Hot-desking without single sign on functionality

"I would say the downside, we hot desk, ...And essentially logging into the computer ...or 10 apps that you need to use. Each app essentially requires your staff logins. And it's like a repetitive process every single day, every single app."

Environmental barriers (2 of 4)

- Challenging for clinicians to transition from brick-and-mortar to virtual environment

" Yeah, I've been working as a clinician for 10 years now. ... I've never done a desk job per se. Like it's just meetings ... the way we do things virtually it's just completely different. So a bit of a steep learning curve. Like working in ED, I don't have to do Excel sheets."

Environmental barriers (3 of 4)

- Legislation not keeping up with pace of change

"a lot of systems are built around legislation. And the change in those legislations then mean, we're able to do what we want to do. Because at the moment, the definition of a hospital is not what we are in terms of what we want to do"

Environmental barriers (4 of 4)

Interoperability challenges

Intra-hospital interoperability
"And it's the same as in the hospital…everyone uses a different service. And you can't see this when you work in there…I don't think the whole system is streamlined"

Inter-hospital interoperability
"I can't see what [other] Hospital writes in the EMR"

Interoperability challenges with external stakeholders
"…if I want to see the ambulance notes, I can't see it … I don't have access. And they can't see our EMR as well"

Key messages

- A technology-enabled environment is not in itself sufficient to drive success of rapid implementation of technologies → organisational capacity factors are important

- Interoperability remains a problem even in a virtual care environment (a new 'battleground')

- Workspaces and the broader environment housing virtual care technologies can be optimised to meet user needs

Recommendations

- Adoption of interoperable systems

- A thorough consideration of 'work as done' when designing workspaces

- Mechanisms for rapid policy changes

- Management of clinicians' expectations when transitioning from brick-and-mortar to virtual hospitals

Thank you

Questions?

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