The Smart Hospital Living Lab

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Smart Hospital Living Lab

Northern Health Royal Children's Royal Melbourne



University of Melbourne Computing Population Health



Government

Department of Health and Human Services Government of Victoria



Expertise on <u>Ubiquitous Computing & User-Centered Design</u>





Smart Hospital Living Lab

Improve hospital operations

Safety:reduce errorsEfficiency:generate insights



Ongoing projects



<u>Smart pill box</u> Identify pills using chemical signatures



<u>Operating theatre tracking</u> Track patients/staff in & out of operating theatres



<u>Hand washing detection</u> Detect (and quantify) hand washing in the hospital



<u>IV line monitoring</u> Continuous identification of liquids/concentrations in IV line



























IV line monitoringContinuous identification ofliquids/concentrations in IV line















7.5

Labelled Concentration (g/100ml)

10.0 12.5 15.0

17.5

20.0

0.0

2.5

5.0



Operating theatre tracking Track patients/staff in & out of operating theatres











Hand washing detection Detect (and quantify) hand washing in the hospital







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totationol metolog, babovarias Rinsalmands with weber and flowersta with clasped Ringers afright local la will pain and vice webs.

















Living Lab: Continuous Innovation





Outcomes and benefits



Improved operations



Generalisable solutions



Pathway to funding



Establish critical mass



Innovation beyond hospitals





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