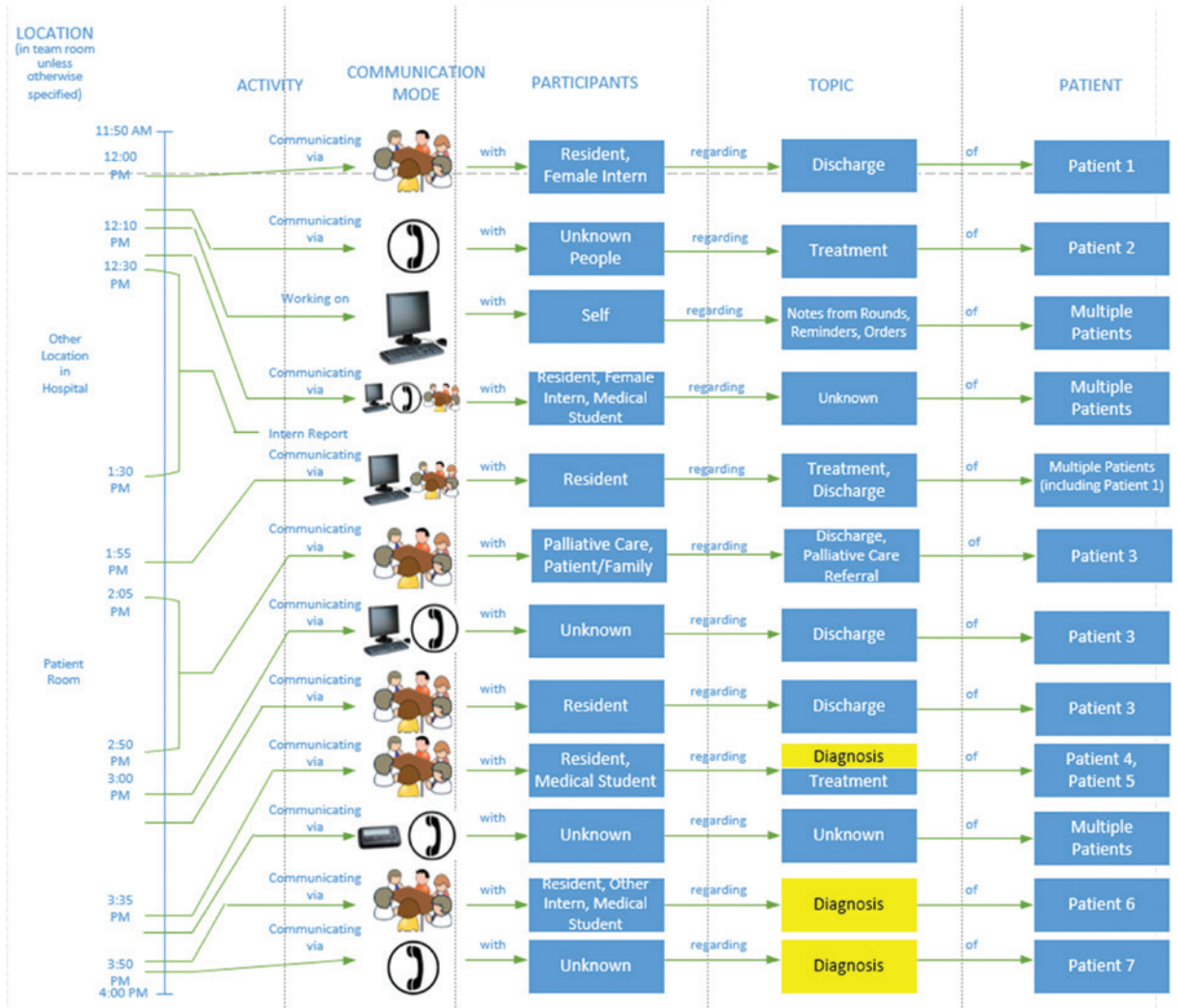Figure. Intern communication

91) Accuracy of a Machine Learning Based Ddx Generator

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Background: Isabel is a well-known DDx Generator used by over 170 institutions around the world. It is built using machine learning as opposed to traditional pre-defined rules based methods.

Methods: 563 cases of diagnostic error were collected over a period of 2 years from case reports, journals and detailed press articles. The cases covered 300 diagnoses and 27 specialties and, on average, contained 6 clinical features each. The free text case presentations were entered into Isabel DDx Generator and the position of the known final diagnosis within the tool's list of ranked possible diagnoses recorded.

Results: In 74% of the cases the final diagnosis was in the top 3 suggestions. In 87% of cases the final diagnosis was in the top 5 suggestions and in 98% of cases the final diagnosis was in the top 10 suggestions.

Conclusion: The level of accuracy shown with a wide range of cases entered in free text demonstrates the potential value and utility of machine learning based DDx Generators in daily practice.

92) Computer-Based Differential Diagnosis Support Tool Improves Patient Satisfaction and the Diagnostic Accuracy of Skin Conditions

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