Smart House for Elderly Assistance
DomoPrev

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1. Why DomoPrev ?

Increasing number of elderly people seeking proper health care at home.

Need to react promptly in case of emergency.

Unwillingness of the elderly to leave their homes for retirement facilities

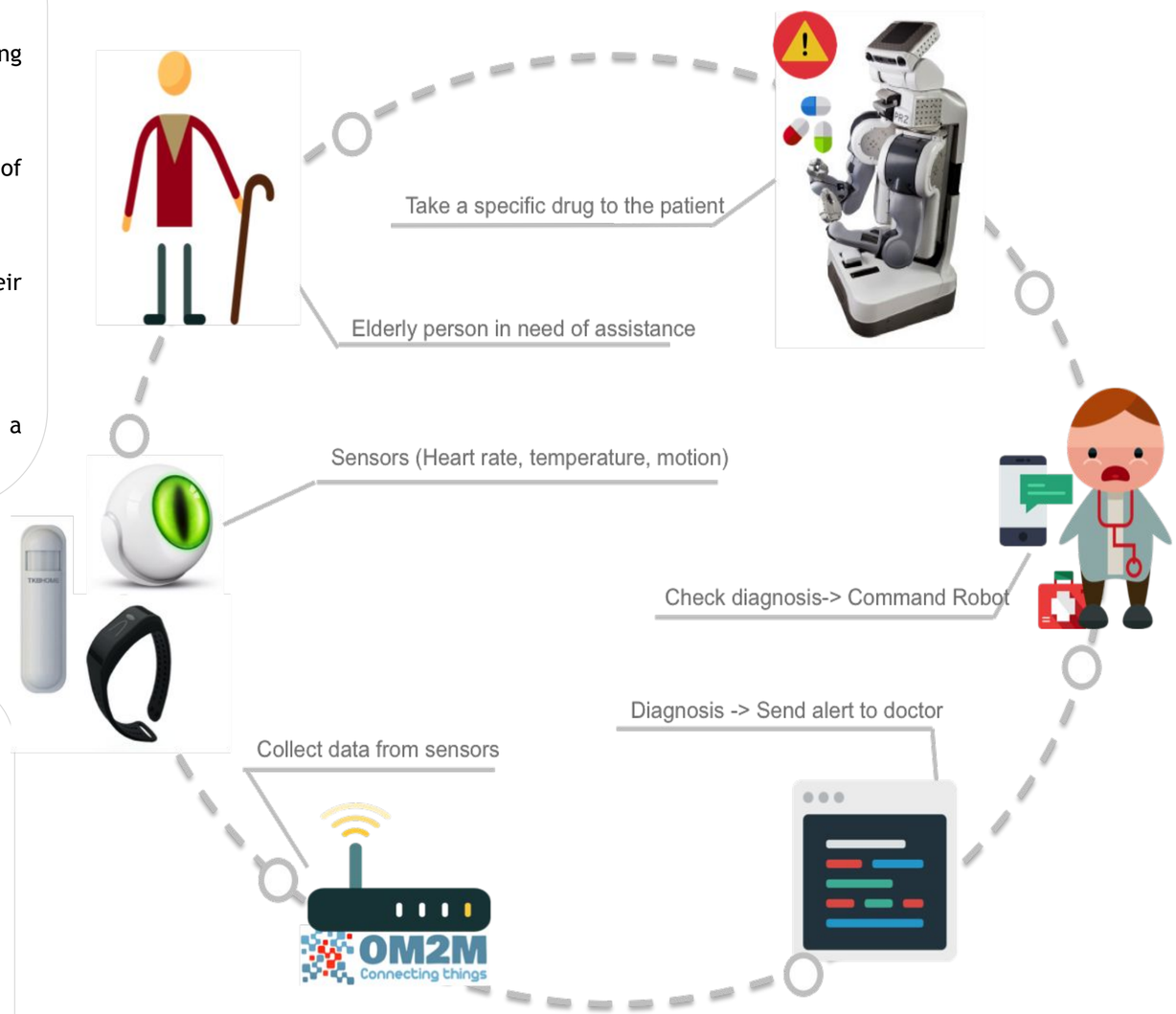
An ounce of prevention is better than a pound of cure

2. What is DomoPrev ?

1. Monitor vital signs of our patient using sensors integrated in the user's home

2. Use the data collected in our database to predict and detect risk factors

3. React to detected threats



3.How to provide assistance?

1.Monitor:
-Heart rate, temperature and numerous other vital sign sensors, send their data to an OM2M gateway
-Collected data is embedded with semantic metadata to enhance context perception

2.Analyse:
-Using the enhanced data, find the correct model for anomaly detection
-Characterise the reliability of the system and confidence level of our predictions

3.Help:

If a potential threat is detected:
Inform the user, and the physician

In case of an emergency, alert health care services, family and the physician
-Robot is sent to provide basic care and gather supplementary information
-The physician can provide real-time medical assistance through the robot

4. Conclusion

- Providing an integral system capable of being modular
- Strong interactions with the health-care system

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