

# Providers' aspect of AI

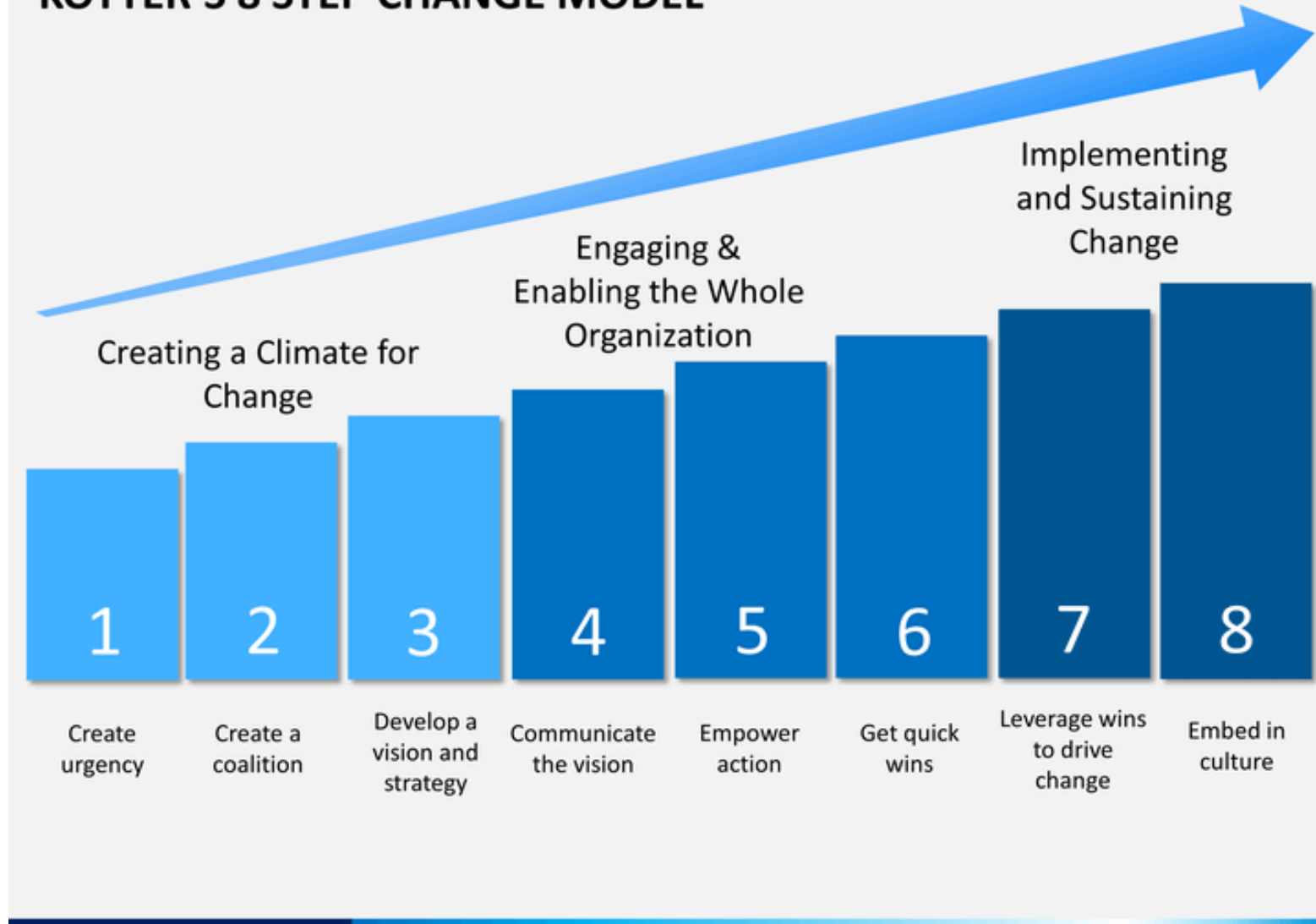
RACMA CONFERENCE 2019

DR PAULINA CHOW

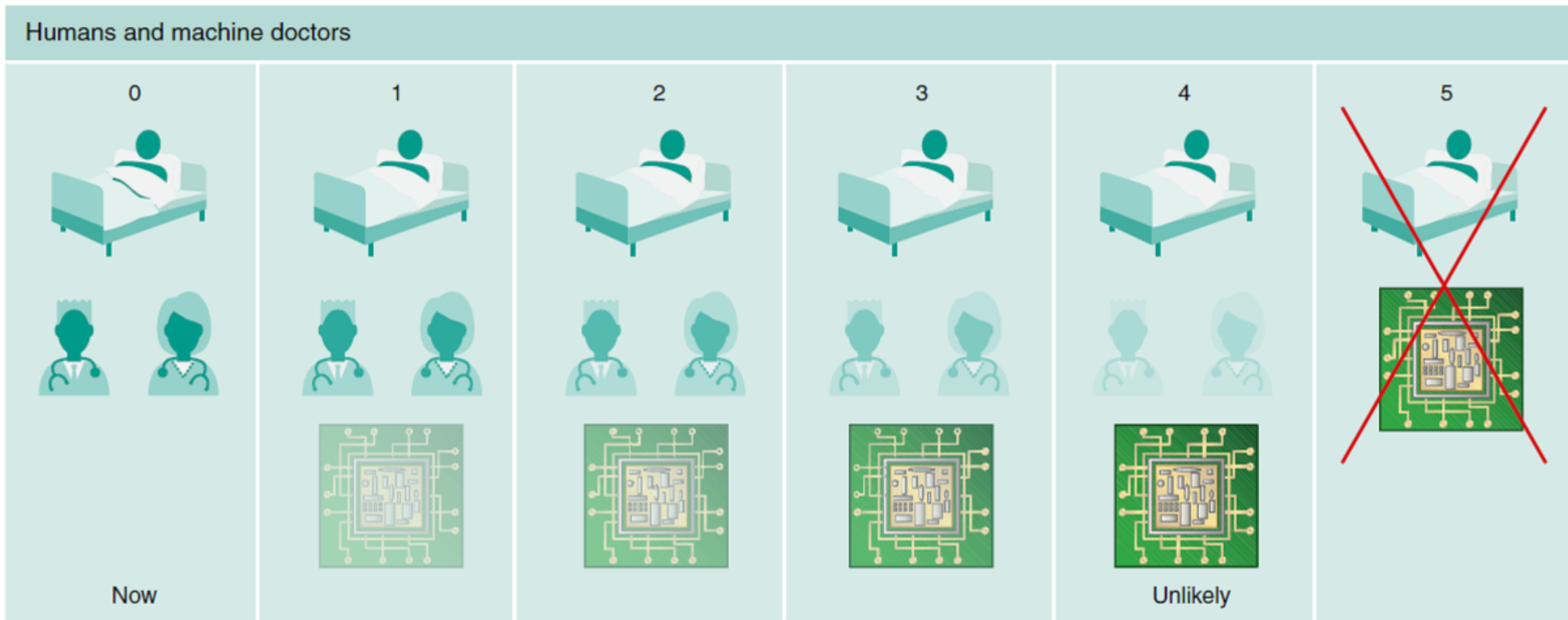
# Why AI?

- ▶ Increasing need for healthcare
- ▶ Increasing complexity of healthcare
- ▶ Limited resources

## KOTTER'S 8 STEP CHANGE MODEL



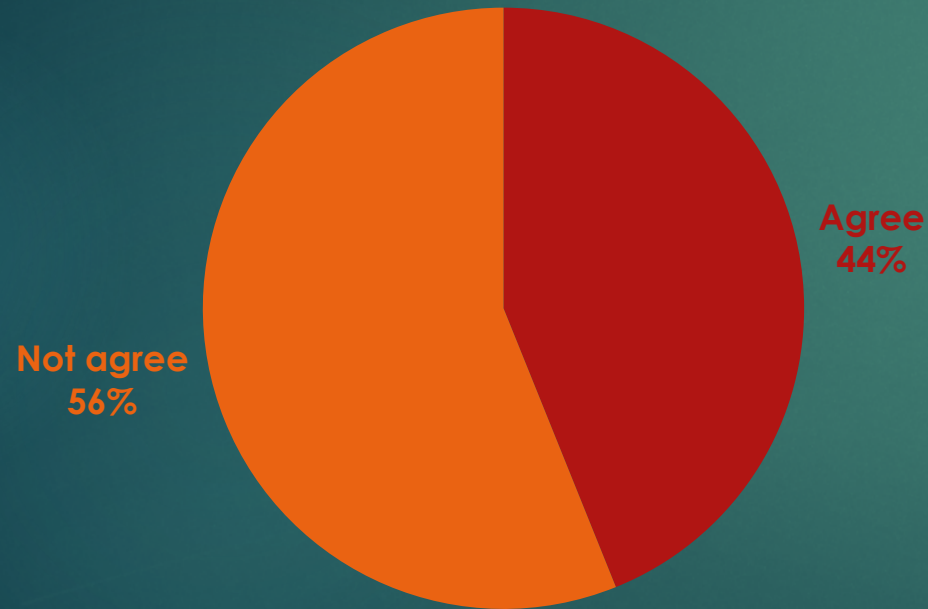
Human driver monitors environment			System monitors environment		
0 No automation	1 Driver assistance	2 Partial automation	3 Conditional automation	4 High automation	5 Full automation
The absence of any assistive features such as adaptive cruise control.	Systems that help drivers maintain speed or stay in lane but leave the driver in control.	The combination of automatic speed and steering control—for example, cruise control and lane keeping.	Automated systems that drive and monitor the environment but rely on a human driver for backup.	Automated systems that do everything—no human backup required—but only in limited circumstances.	The true electronic chauffeur: retains full vehicle control, needs no human backup, and drives in all conditions.



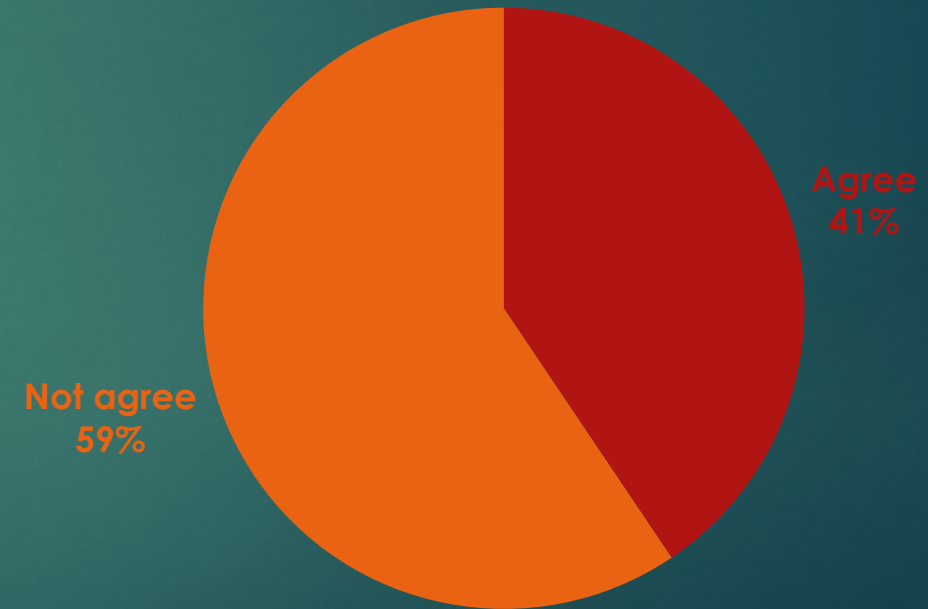
**Fig. 5 | The analogy between self-driving cars and medicine.** Level 5, full automation with no potential for human backup of clinicians, is not the objective. Nor is Level 4, with human backup in very limited conditions. The goal is for synergy, offsetting functions that machines do best combined with those that are best suited for clinicians. Credit: Debbie Maizels/Springer Nature

# AI vs human doctors

## AI IS SUPERIOR TO human doctors



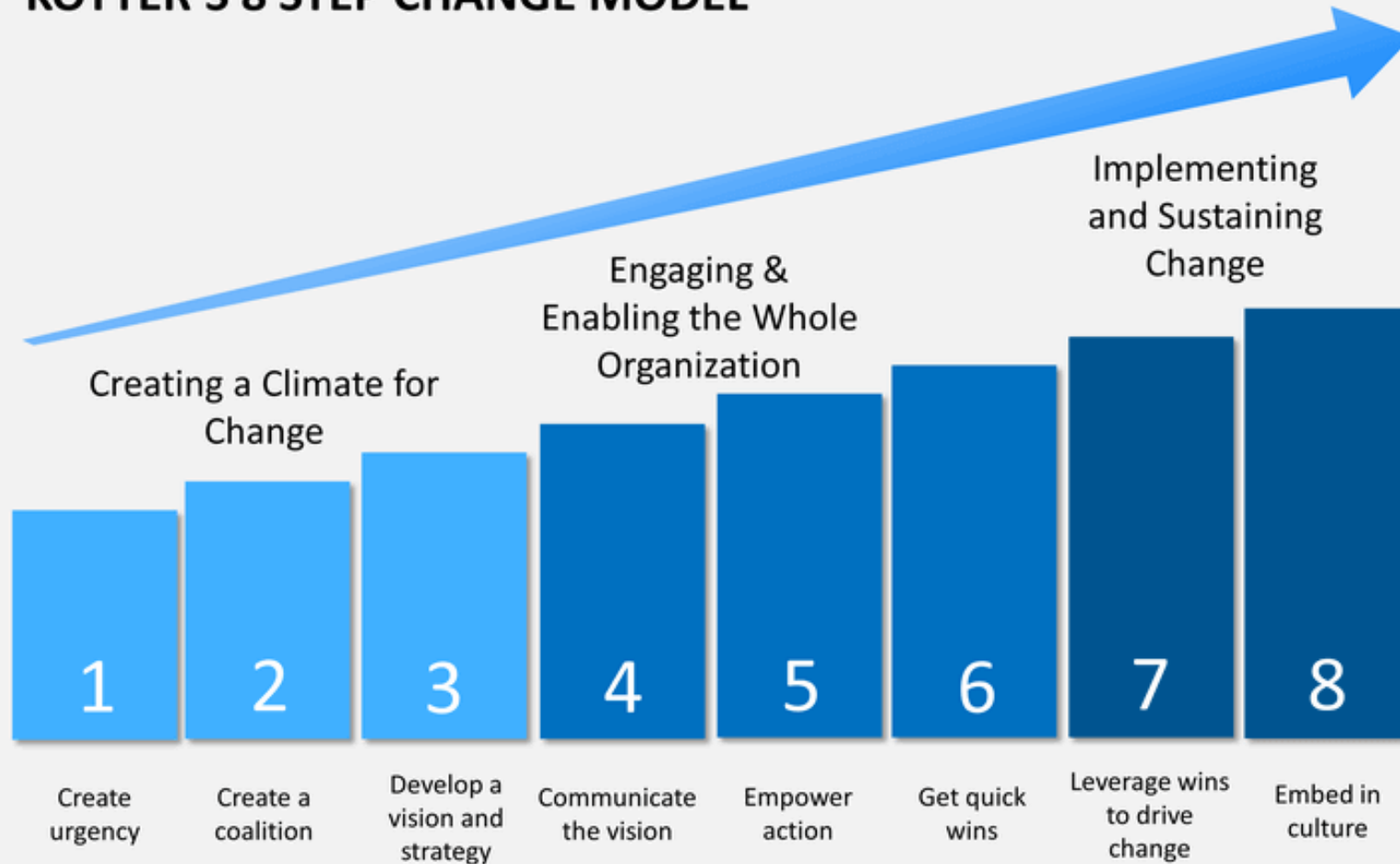
## AI CAN REPLACE human doctors



# Providers' consideration

- ▶ Exponential iatrogenic risk of a faulty machine algorithm
- ▶ Opacity in machine learning
- ▶ Evaluation, approval, and regulatory environment
- ▶ Automation complacency and de-skilling: will need targeted strategies to maintain the practical expertise of clinicians

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# References

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