MedicBot / Product & Engineering

The robot. The experience. The engineering.

Six sections | November 2026

Meet MedicBot — Your Healthcare Assistant

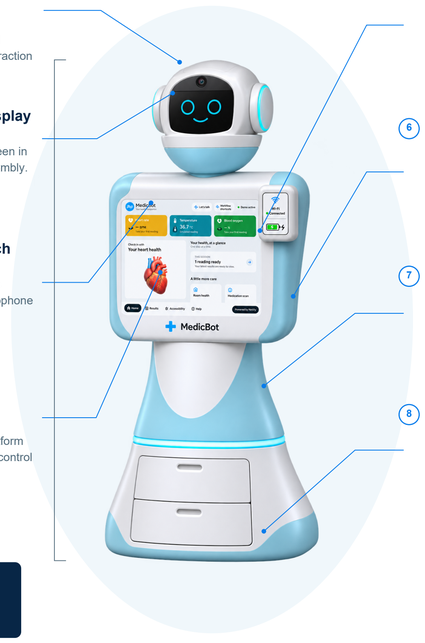
An approachable robot being developed for staff-supported experiences in clinics and care homes.

1 An expressive head
SOFTWARE
Animated eyes and mouth give the interaction a visible focus.

2 7-inch face display
CAD DESIGN
Dedicated face screen in the CAD head assembly.

3 Audio & speech
SOFTWARE + PLANNED
Prepared speech is implemented. Microphone input is planned.

4 Onboard processing
IN DEVELOPMENT
Pi 4 application platform with separate Pico control development.



5 14-inch touchscreen
CAD + SOFTWARE
Portrait display in the CAD; touch-led navigation in the application.

6 Sensor modules
PLANNED
Pulse, oxygen, temperature and GSR candidates need integration; mounts are not final.

7 Modular structure
CAD DESIGN
Printed shells and removable panels support access and revision.

8 Storage drawers
CAD DESIGN
Two manual pull-out drawers; no dispensing function claimed.

09 / OVERALL HEIGHT
≈135 cm

Approved exterior visual · screen content is illustrative.

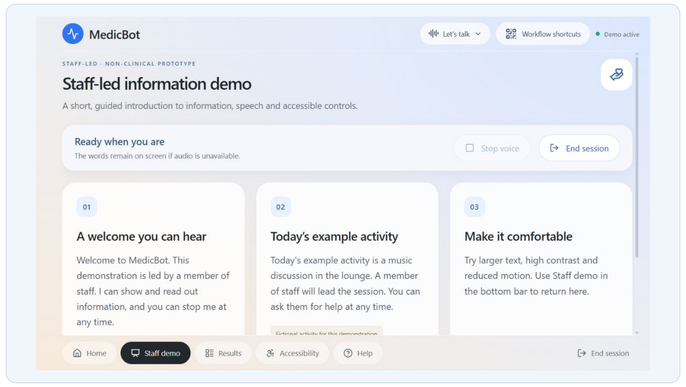
A useful introduction, led by people.
Current software supports prepared information, spoken prompts and accessible controls. Clinical functions remain unvalidated.

Development prototype · not clinically validated. Illustrations do not establish performance.

SOURCES P1–P4, C1, V1 · Full evidence and image notes included in the collection.

A clear interface. A staff-led experience.

Prepared information, spoken prompts and visible controls in one guided demonstration.



ACTUAL CURRENT DEMONSTRATION SOFTWARE

1 Choose the message
Staff select a prepared welcome or activity introduction.

2 Control the session
Start or stop speech and reset the demonstration.

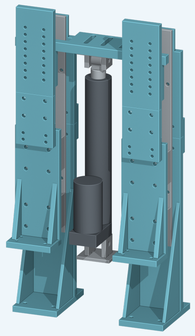
3 Adjust the display
Explore larger text, contrast and reduced-motion settings.



Console + face
Shared state keeps the face display connected to the session.

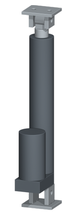
A guided lift. A flexible working height.

A 150 mm lift mechanism with twin guides and an adjustable mounting structure.



COMPLETE LIFT ASSEMBLY

150 mm
Specified actuator travel



WODHMIEY
Linear actuator with upper and lower clevis mounts.

Hardware shown as a CAD envelope.

2 x 300 mm SBR16 guides
Four bearing blocks guide the carriage.

Adjustable crosshead
0-50 mm indexed mounting adjustment for the final actuator fit.

Guided carriage
Rails and bearing blocks connect to the moving body structure.

Fixed lower base
Guide towers and actuator mount connect to the floor base.



Rear view
Guide towers, rail mounts and moving crosshead.



135-150 cm
Lowered / raised CAD height.

Head, body and drawers rise; the floor base stays fixed.

Design dimensions. Fit, end stops, electrical protection, load and stability require physical validation.

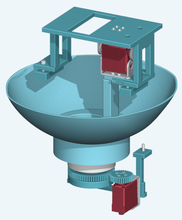
An expressive head. A clear interaction.

Visible expressions and prepared speech support an introduction led by a member of staff.



ATTENTIVE · FRIENDLY · SPEAKING

Illustrative expression studies on the approved head design.



CURRENT CAD / NECK ASSEMBLY

Two axes, one head
A servo pair provides geared yaw and direct tilt.

Gearing and support
A 32-tooth pinion drives a 64-tooth gear for 2:1 yaw reduction.

Separate motion control
Neck commissioning remains separate from the main application.



The real face application
The console and face share application state. Staff choose and start each prepared message.

Head studies are illustrations. Mechanical fit, motion and audio hardware still require physical testing.

People lead the care. MedicBot supports the introduction.

Explore short welcomes, activity introductions and routine information with staff present.



CARE HOME

A familiar introduction
A member of staff selects the message. Text stays visible while prepared speech provides another way to follow.



CLINIC

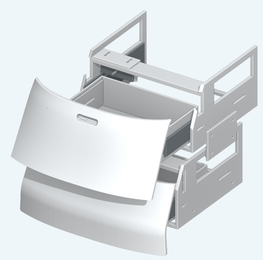
A supported interaction
Explore routine information and touch-led prompts together. Practical usability and benefits still need evaluation.

Concept scenes, not deployment photographs. Screen artwork is illustrative.

Help shape the next step.
enquiriesmedicbot@gmail.com

Practical storage. Independent access.

Two manual drawers with telescopic runners and dedicated battery-powered card locks.



OPEN DRAWER ASSEMBLY



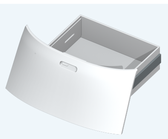
Scan the card. Pull by hand.

CLOSED ASSEMBLY

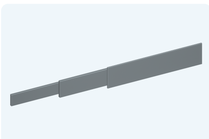
200 mm
Runner length + extension

13 mm
Side clearance in CAD

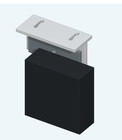
4 x AAA
Batteries per lock



Individual tray
Approx. 210 mm wide x 224/230 mm deep x 63 mm high externally.



Telescopic runners
One AOLISHENG pair per drawer. Fixed, middle and moving members.



RFID lock + striker
One independent QWORK lock per drawer. Adjustable striker bracket.

Locks are independent of the chest reader and Pi. Physical fit, card reading and payload remain to be tested.

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