

Using Bots to Support More Efficient Workflows and Reduce the Risk of Clinician Burnout

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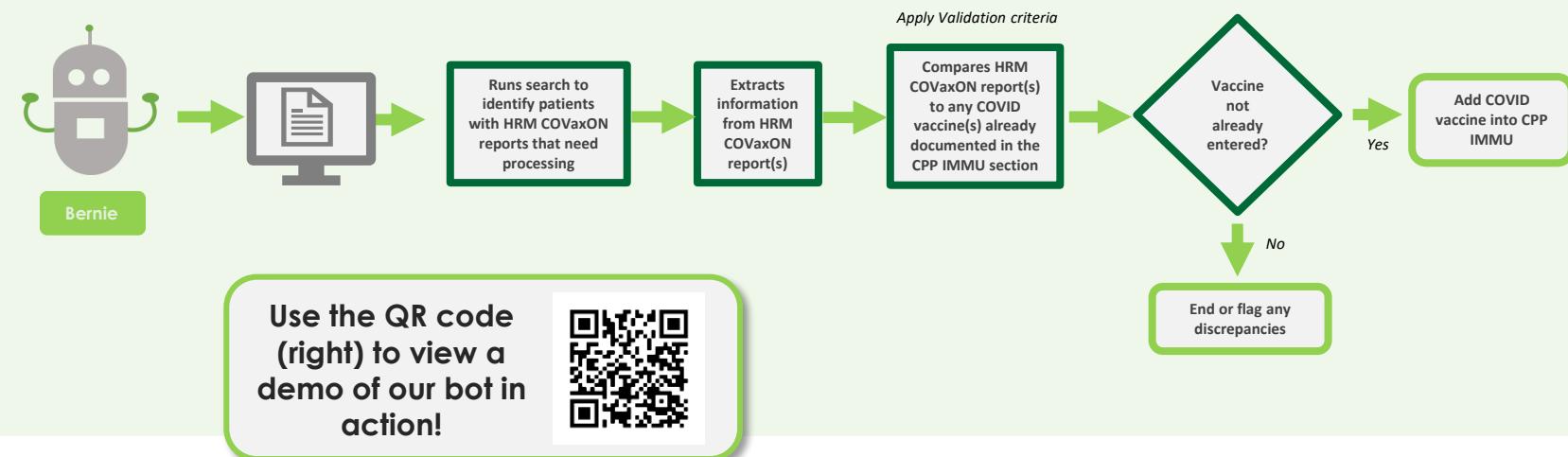


Background and Bot Processes

Clinician burnout is a widespread issue in Canadian healthcare.¹ Understanding that administrative burden has been cited as a major contributing factor to burnout,² the eHealth Centre of Excellence created a new division, eCE Automates, to develop Robotic Process Automation (RPA) solutions to support efficient workflows and reduce workload strain for clinicians.

Automation is the use of software to replicate the actions of a human who is interacting with computer systems. RPA “bots” designed by eCE Automates can capture and interpret data to trigger action and reconciliation on previously manual, repetitive tasks within primary care EMRs. For instance, the **Bernie COVID-19** bot seamlessly automates the process of updating a patient’s COVID-19 vaccination record within the EMR based on the HRM COVaxON vaccination report (Figure 1).

Figure 1: How does the Bernie COVID-19 bot work?



Tool Adoption and Findings

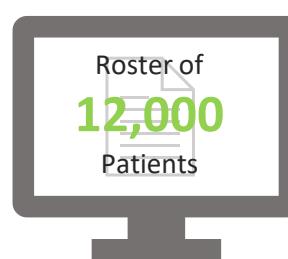
Tool Adoption

The Bernie COVID-19 bot has been operational since May 2021 and has been adopted by many physician practices across Ontario within 22 Ontario Health Teams.



Case Study

When assessing the bot’s performance in a mid-sized clinic of 10 physicians, with a combined total of 12,000 patients, the bot saved an estimated 87 hours of manual COVID-19 vaccine reconciliation.



Estimated **87** Hours Saved

Key Features

- ✓ Bernie COVID-19 bot offered at no cost to the organization
- ✓ No program or software installation required
- ✓ No impact to the organization’s server
- ✓ Automatic summary report provided

Discussion

Our bots work to improve clinic workflows by reducing the number of hours spent on administrative tasks by physicians and staff. The bots ensure that these tasks are done efficiently and correctly, allowing physicians more time in their day for patient-facing care, and decreasing the risk of burnout.

Additionally, the bots can contribute to proactive care by flagging patients who could benefit from an additional assessment or vaccine.

References

1. Canadian Medical Association. (2019). *Physician health and wellness in Canada: Connecting behaviours and occupational stressors to psychological outcomes*. Retrieved October 2020, from https://www.cma.ca/sites/default/files/pdf/Media-Releases/NPHS_Report_ENG_Final.pdf
2. Ontario Medical Association. (2021). *Healing the Healers: System-Level Solutions to Physician Burnout – Recommendations of the Ontario Medical Association Burnout Task Force*. Retrieved February 2022, from <https://www.oma.org/uploadedfiles/oma/media/pagetree/advocacy/health-policy-recommendations/burnout-paper.pdf>

About the eHealth Centre of Excellence

The eHealth Centre of Excellence is a not-for-profit organization that assists clinicians, healthcare organizations, and Ontario Health Teams across the province with the meaningful and sustainable adoption of digital health tools that can enhance practice efficiencies and improve patient outcomes.

