

Experiences Implementing Ambulatory EMRs and Early Benefits

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Today's Presentation

- Infoway and Investment in Ambulatory EMR
- Adoption Progress
- Emerging Benefits
- Success Factors



Who and what is *Infoway*?

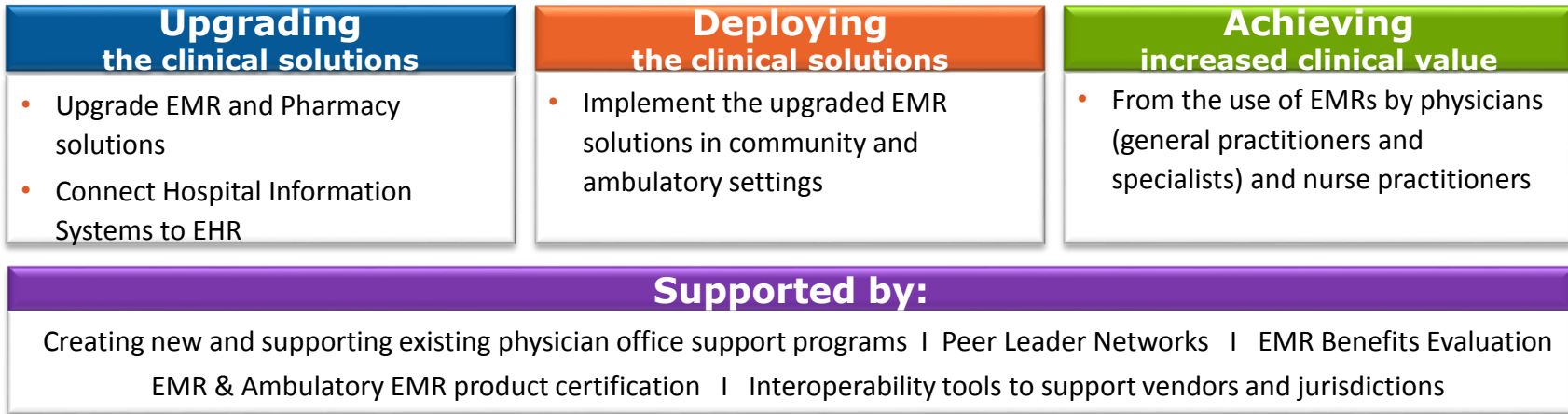
With our partners, *Infoway* helps accelerate the development, adoption and effective use of digital health solutions across Canada



Canada's Economic Action Plan

In 2009, Canada's Economic Action Plan provided \$500 Million to Canada Health Infoway. Of this amount \$380 million was allocated to EMR investments:

The EMR investment is focused on:



Ambulatory EMR Investment Objectives & Progress

Enhance EMR Interoperability with the EHR

- Approx. 40 RHA/hospitals; 10 different hospital information systems have been upgraded and connected to jurisdiction EHRs

Increase Ambulatory EMR adoption

- Initial objective was to deploy up to 8000 seats in ambulatory clinics.

Achieve increased clinical value

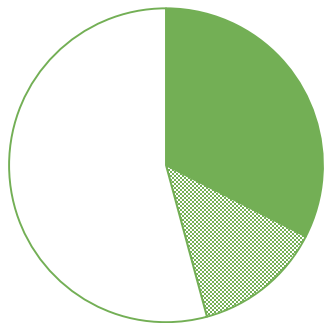
- Achieve Clinical Value 1
- Achieve Clinical Value 2

PROGRESS to DATE

- 60+ hospitals using 11 different hospital information systems that have been upgraded
- 11,879 seats funded due to demand. Of these, 98% have been deployed
- ~76% of Clinical Value 1 targets have been met.
- ~40% of Clinical Value 2 targets have been met.

Ambulatory EMR Canadian Landscape Estimates

Frequency of Clinician eCharting



■ Routine

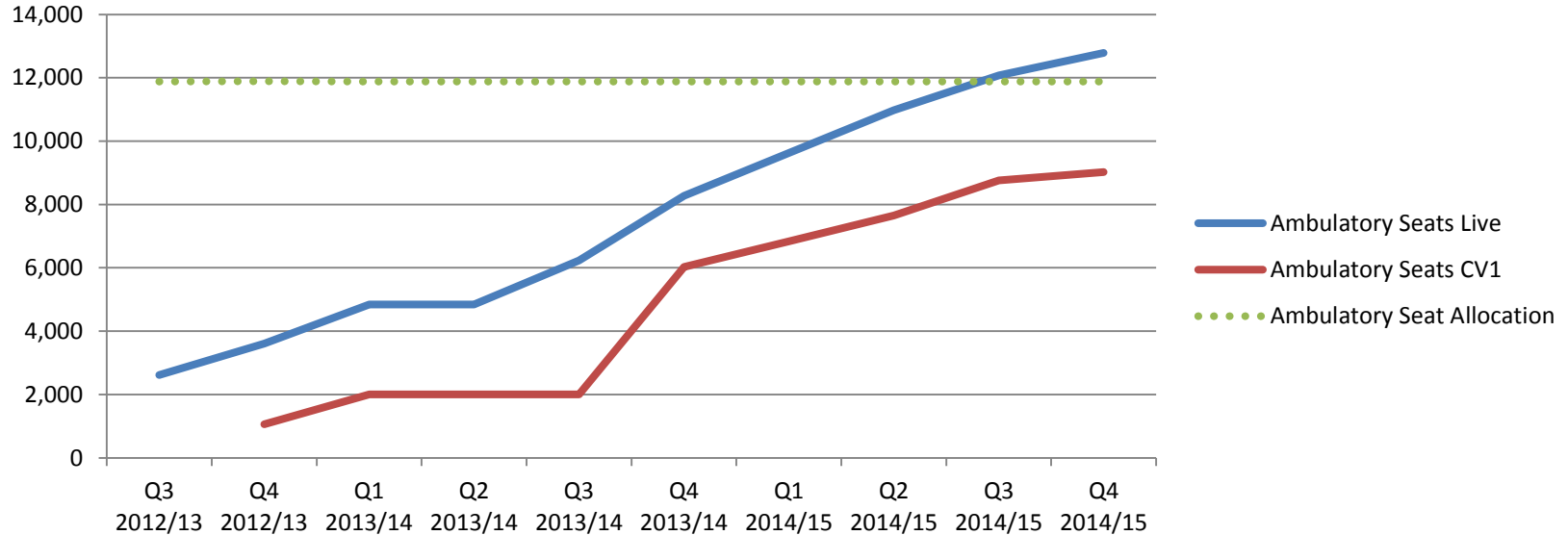
■ Occasional

□ Other

- **9,830** hospital-affiliated ambulatory outpatient clinics (2013)
- **57,000** clinicians and other staff
- **44 million** visits/year

Source: Ambulatory EMR Landscape Survey, Harris Decima, (October 2013)

Ambulatory EMR Use to Date

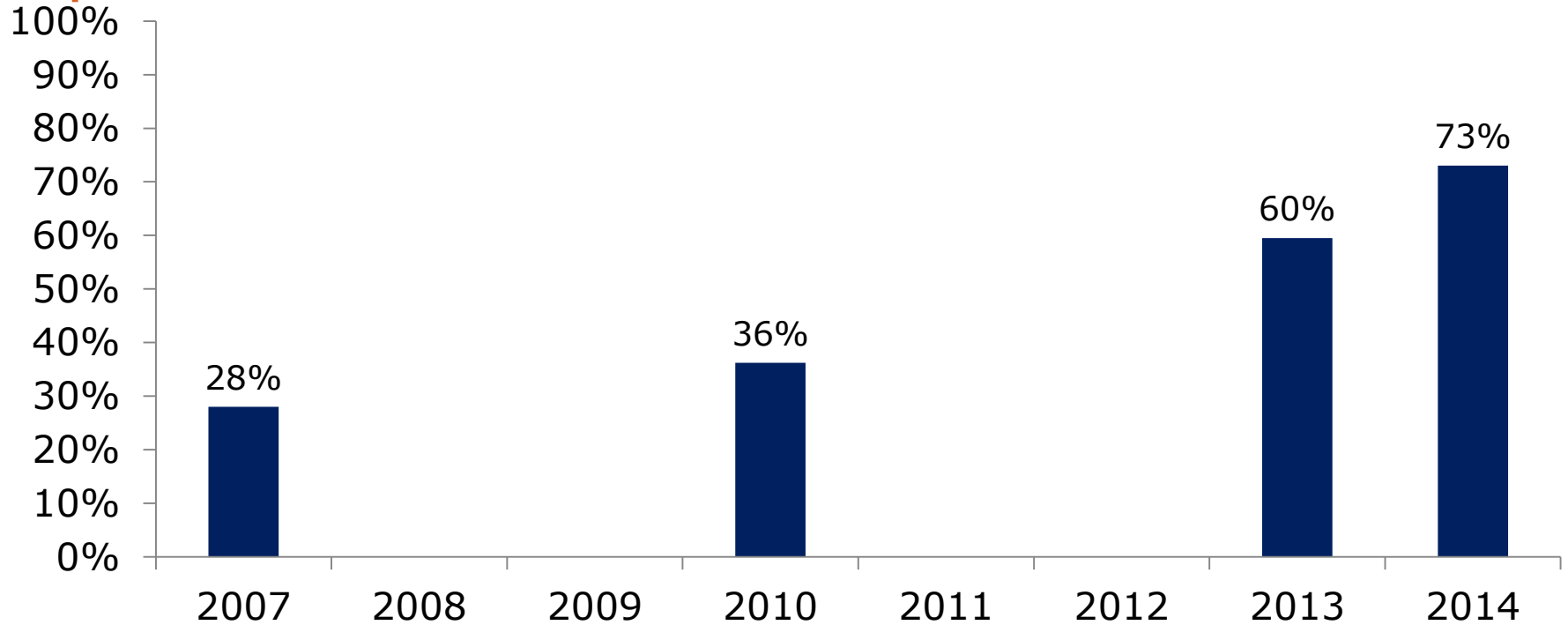


32% of clinics across Canada routinely enter clinical encounter notes electronically, a good indicator of mature EMR adoption.

Notes:

- 1) Quarterly reporting for Ambulatory EMR seat go lives began in Q2 2012/13

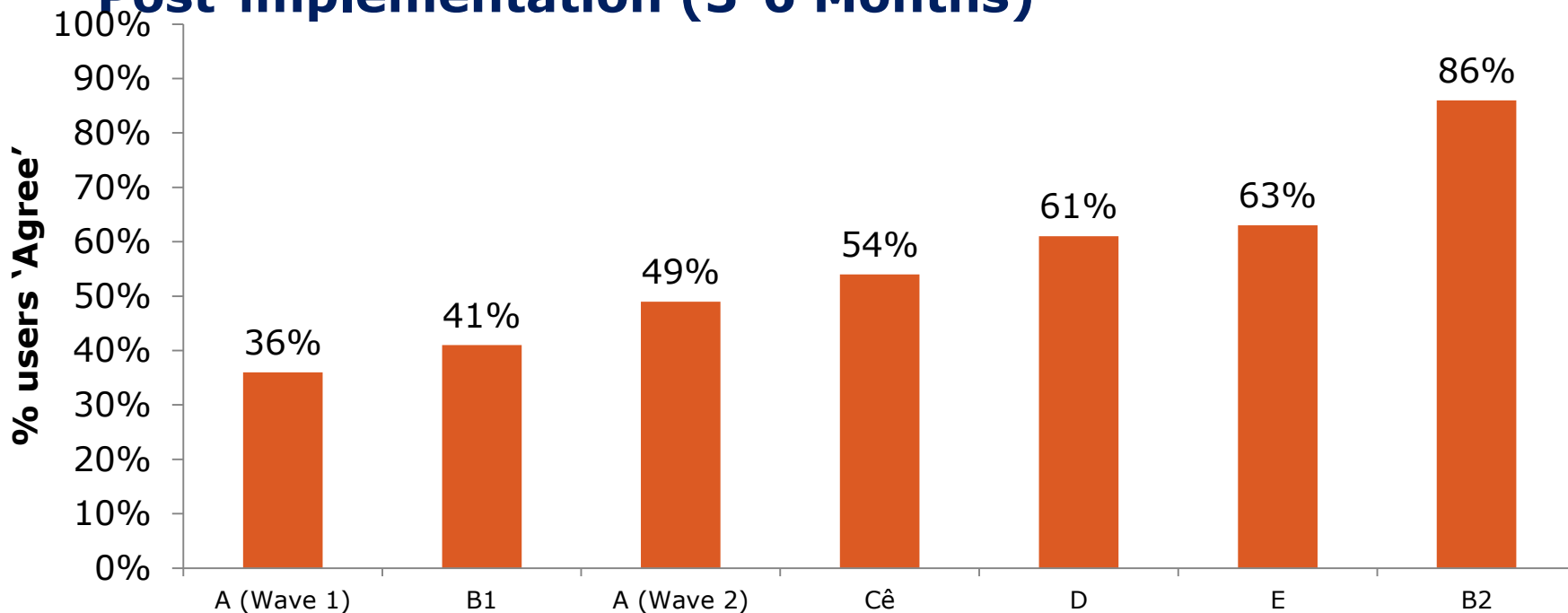
Specialist EMR Use - Canada



Source: Data from National Physician Survey (2007, 2010, 2013 & 2014)
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Evaluation Results

Overall, I Find the System Easy to Use Post-implementation (3-6 Months)



Source: System and Use Survey administered by Infoway AMB EMR Projects:

*Assessment done at 20-months post implementation

What Specialists Say: Average Productivity Gains

+11% for clinicians

+11% for clinics



Clinician and Clinic Process Efficiencies

Admin, Nursing and Physician Process impact

10 - 50% Reduction in time spent:

- Locating Chart
- Reviewing Chart
- Order/retrieve labs and other tests
- Appointment scheduling



Same/More time spent:

- Entering clinical documentation/orders
- Medication reconciliation
- Information transfer to external sources/providers
- Generate reports

Source: Centre for Research in Healthcare Engineering, University of Toronto. Benefits of EMR Adoption in hospital-based Outpatient Ambulatory Clinics (2014)

From the Project Files

Examples of Clinician and Clinic Efficiencies

- **80% reduction** in staff time calling patients
- Reduction in transcription FTE's from 51.8 to 17.63, estimated annual savings: **\$2.2 million**
- Reduced average transcription cost per clinic/dept
-\$714

What Specialists & Staff Say

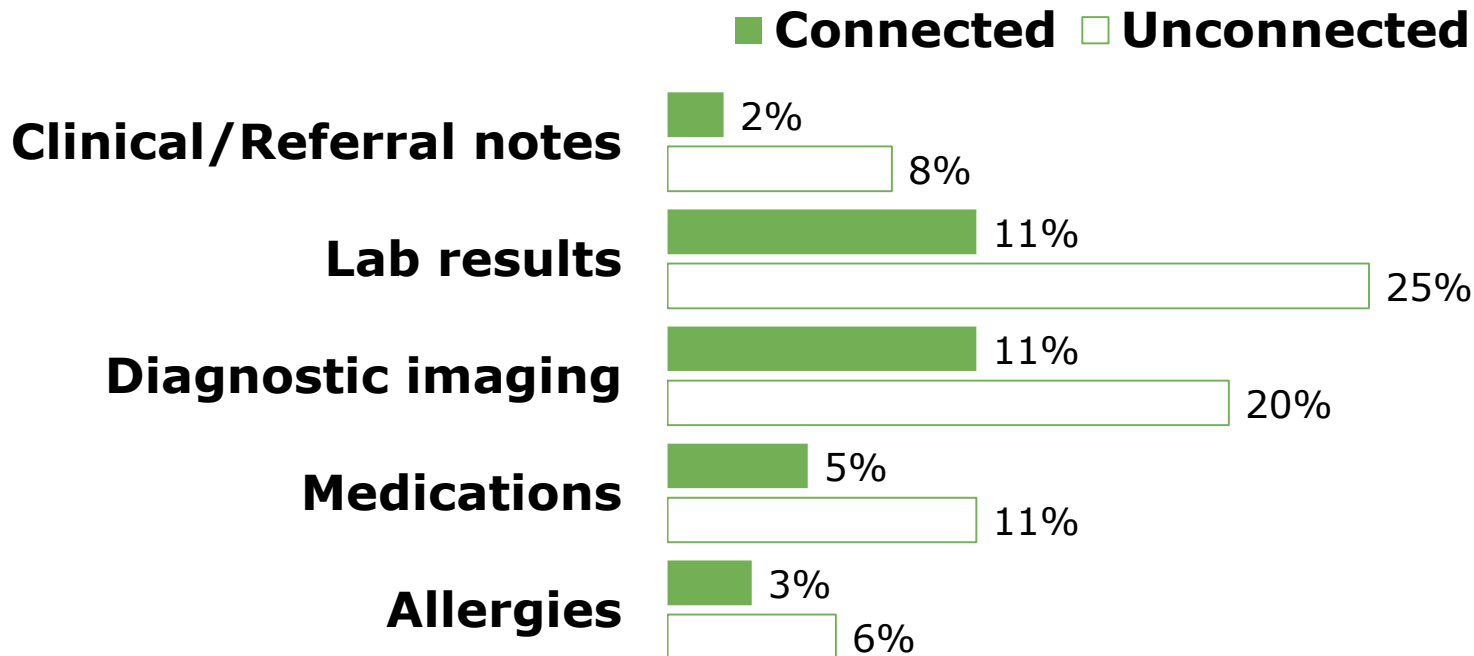
82%: improved info sharing among providers

91%: can now find patient info quickly & easily

89%: timely access to clinical doc improves decision-making



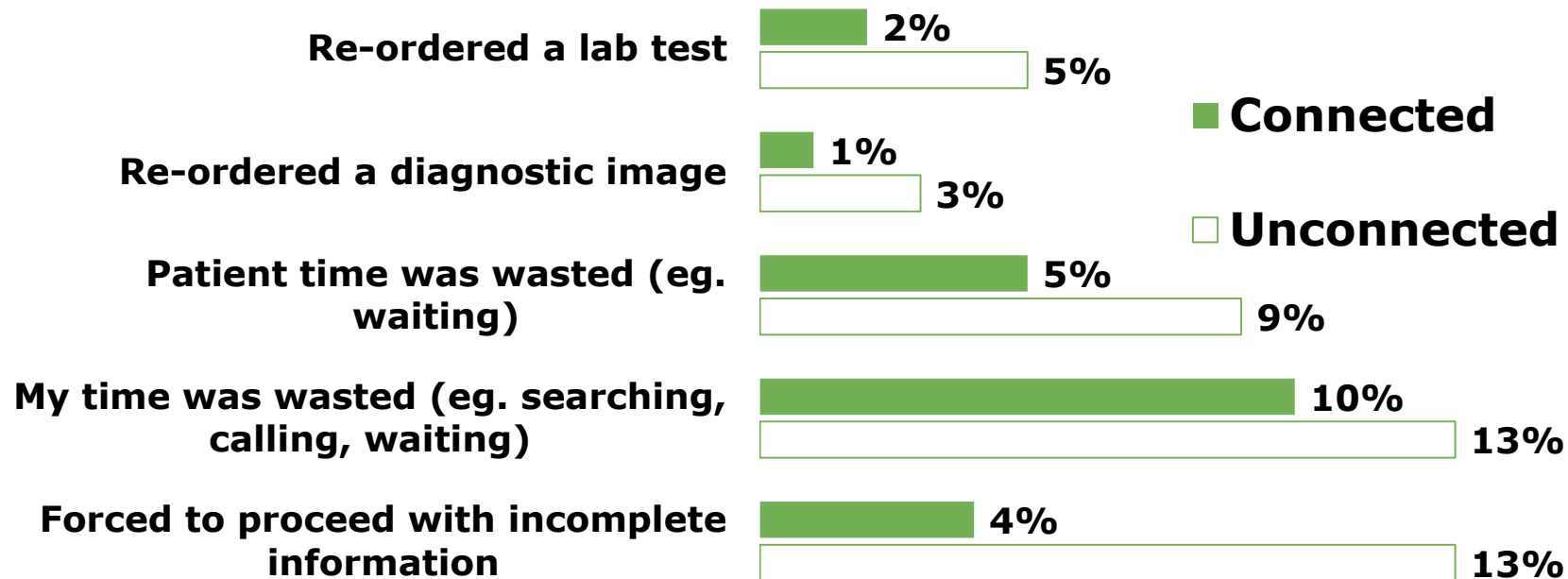
Connected Amb MDs see Fewer Info Gaps



% of encounters for which a specific type information was required where an information gap existed

*All results statistically significant. Source: Infoway Ambulatory Outpatient Clinic Information Gaps Study

Info Gaps Cause Fewer Consequences for Connected Amb MDs



% of all encounters for each cohort with a specific impact generated by an information gap

*All results statistically significant

From the Project Files ***Improved time-to Cancer Treatment***

Consultant
Appointment

```
graph TD; A[Consultant Appointment] --> B[Date of first treatment]
```

Date of first
treatment

- Hemato-oncology: **7 days sooner**

Source: Sicotte C., et al (2014) Implementation of an electronic health record specifically for cancer Phase 2: Quantitative analysis of impacts associated with the deployment of a specialized electronic health record at the Centre intégré de

From the Project Files Improved throughput and interaction

- 19% – 40% reduction of in-clinic wait times in two studies
- 86% physicians report improved interaction with patients
- 82% patients report care provider accessed info from prior visit



What Specialists Say

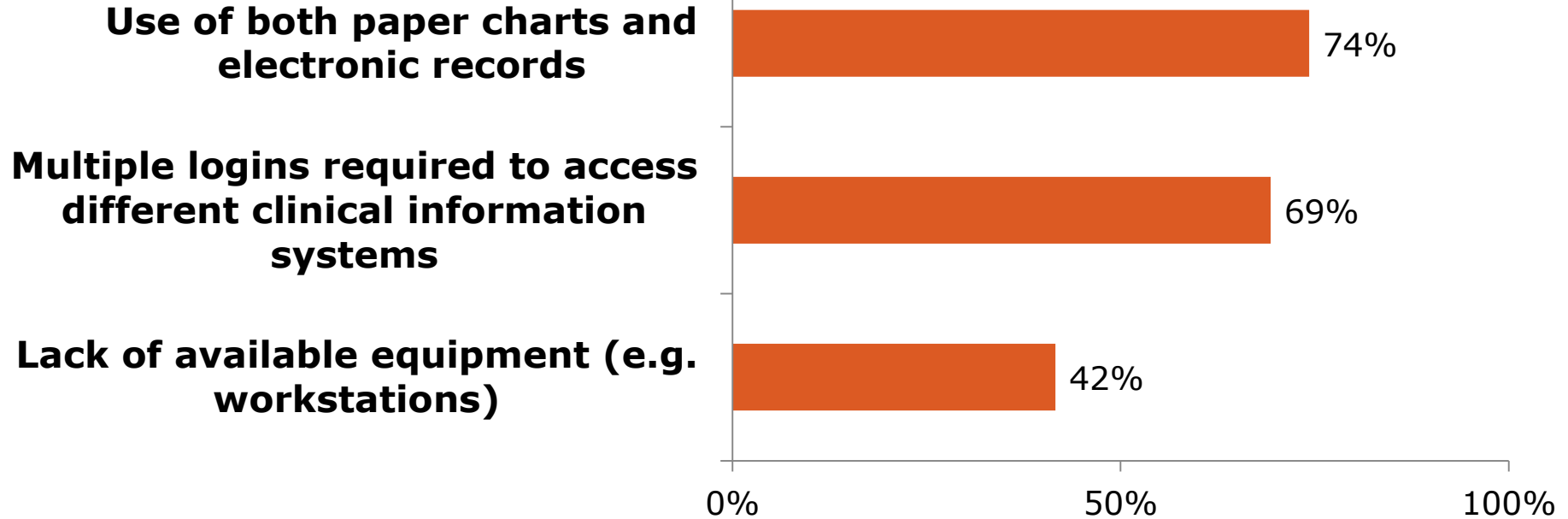
64%: Ambulatory EMRs
are beneficial or very
beneficial for quality of care



Barriers to Value and Success Factors



Barriers to realizing full clinical value of EMR: Outpatient Ambulatory Clinic Nurses



Source: 2014 Infoway-CNA National Nurses Survey

Base: All respondents in clinical practice providing direct care in In-patient (critical care) setting (n=119)

Top Project Risks and Issues

1. Schedule

- Projects underestimate complexity and dependencies, causing delays

2. Scope

- Ambitious project scope and required scope adjustments

3. Adoption

- Diverse clinics and populations within projects

Success Factors: Sustained Change Effort

- **Workflow analysis & integration** with administrative and clinical practice requirements and hospital and/or regional IT systems
- **Stakeholder engagement and training** supporting use of advanced features and multiple systems
- **Leadership and governance** ensuring commitment to scope and resources long-term

