

Final Report

Survey of Canadian Community Pharmacists: Use of Digital Health Technologies in Practice

August 2014

Commissioned by



CANADIAN
PHARMACISTS
ASSOCIATION

ASSOCIATION DES
PHARMACIENS
DU CANADA



Canada
Health
Infoway

Inforoute
Santé
du Canada

Background and Methodology

- Canada Health Infoway, in partnership with the Canadian Pharmacists Association, invited community pharmacists to participate in a survey to understand their use and perceived benefits of electronic systems in practice.
- To this end, Harris/Decima was asked to host an online survey and analyze the results from it.
- The CPhA and provincial pharmacy associations distributed email invitations to its members.
 - 447* surveys were completed
- In addition, the data were weighted to reflect the universe of pharmacists in a community setting.
 - Source document was the *Pharmacists Workforce, 2012* from the CIHI.
 - Weighting factors that were applied are well within the industry standards (under 2.5)

*447 surveys were completed across 9 provinces as follow : AB (n=65), BC (n=55), MB (n=20), NB (n=21), NL (n=23), NS (n=25), ON (n=114), PEI (n=27), SK (n=97). Note that analysis by province is not provided in this presentation. Quebec, Nunavut , NWT and Yukon did not participate in this survey.

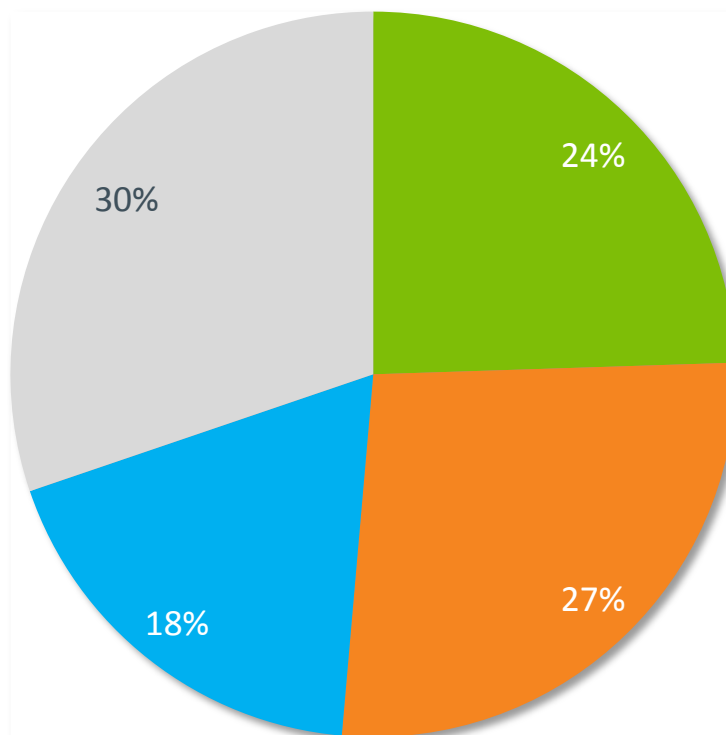
Respondent Profile

Commissioned by :



Respondents represent various community practice settings

Q2. Please specify your main community pharmacy practice setting: *Check only ONE*

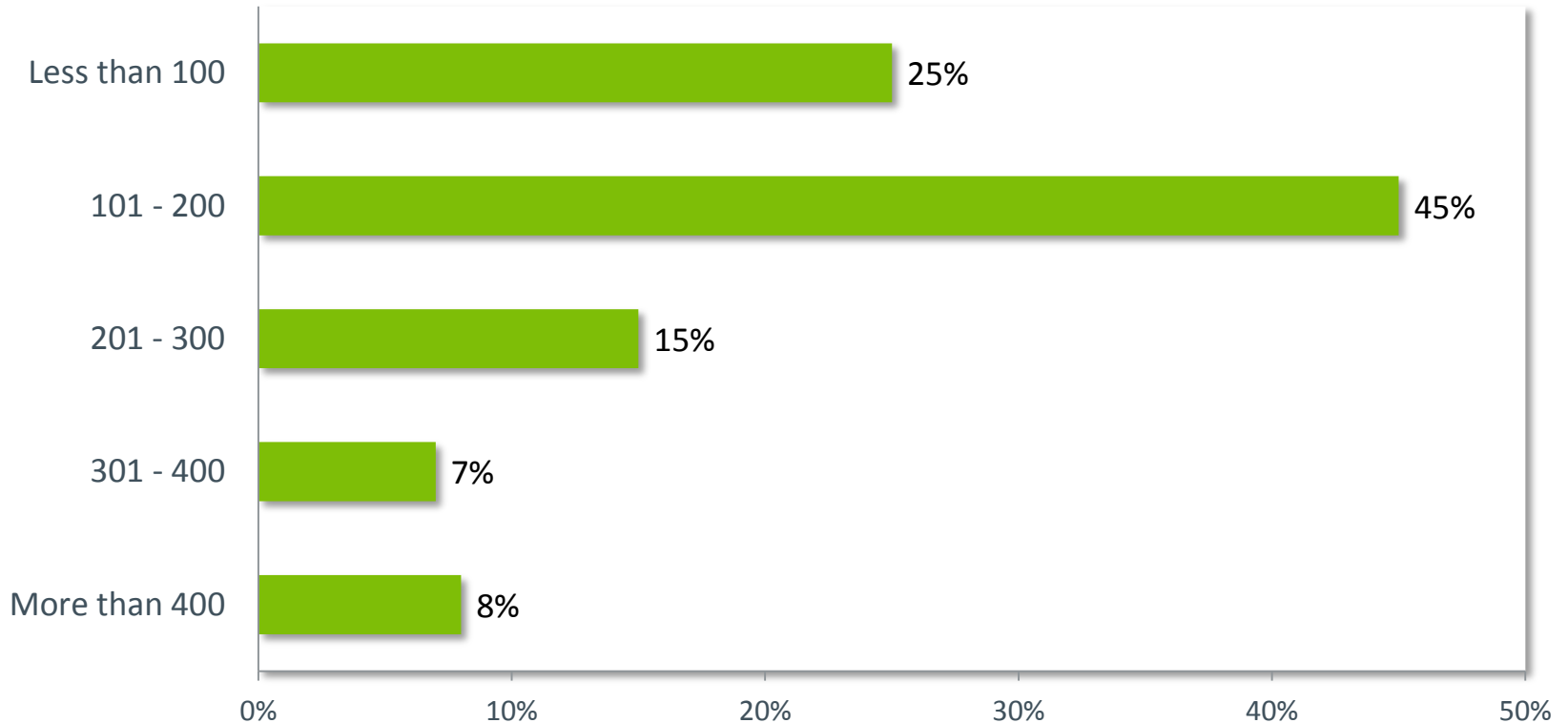


- Community Pharmacy – independently owned
- Community Pharmacy – chain/franchise (e.g. Shoppers Drug Mart, Jean Coutu, Pharma Plus, Lawtons)
- Community Pharmacy – pharmacy located within a large retail operation
- Community Pharmacy – banner (e.g. I.D.A, Guardian, Uniprix, Price Watchers, Pharmasave)

Base: All respondents (n=447)

A majority process two hundred or fewer prescriptions

Q3. Please estimate the average number of prescriptions dispensed (per day) in your main community pharmacy practice:



Base: All respondents (n=447)

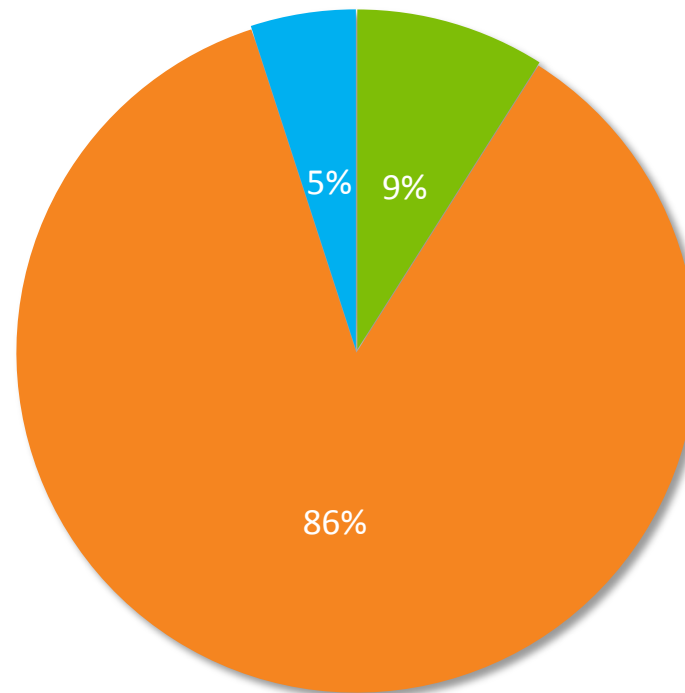
Current State of Electronic System Use

Commissioned by



Majority practice in a paper and electronic combination setting

Q4. Thinking about your MAIN practice setting, which of these describes the patient record keeping system that you use? *Please check ONLY ONE*



■ Electronic INSTEAD of paper

■ Combination paper and electronic

■ Paper only

Base: All respondents (n=447)

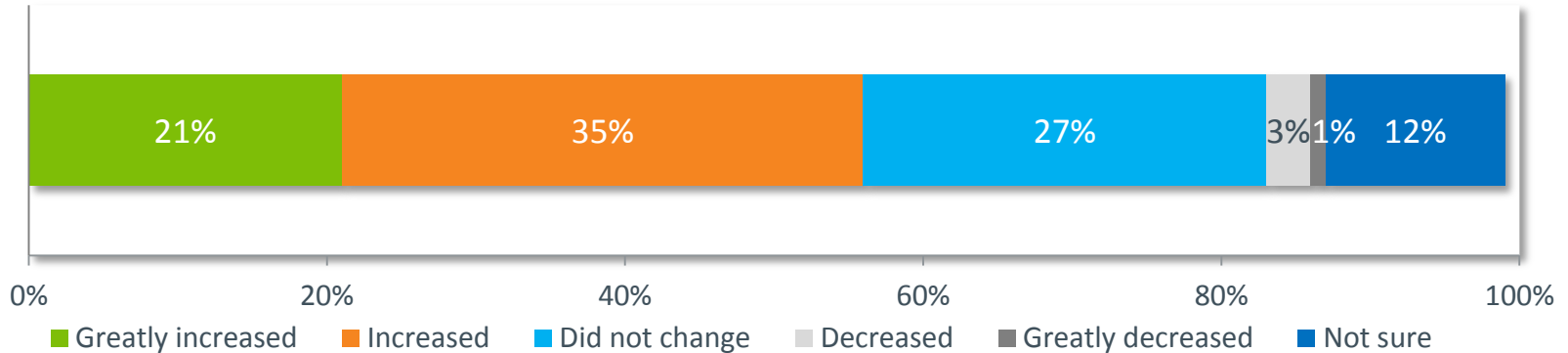
Access and use of specific functionality

| | I used this on... | | | | | | |
|---|---|--------------------------|--------------------------------------|--|---|---|----------------------|
| | A Pharmacy practice management system (Kroll, Telus, ProPharm, Rx-PRO etc...) | Another software program | mobile device (smartphone or tablet) | This is available but I do not have access | This is not available – I would like to have this | This is not available – I would not like to have this | Don't Know/ Not sure |
| Electronic reminders for recommended patient care (e.g. follow-up of care, monitoring, med reviews, immunizations) | 78% | 7% | 6% | 4% | 11% | 0% | 4% |
| CPhA e-Therapeutics+/eCPS electronic clinical decision support tool | 52% | 42% | 22% | 2% | 5% | 1% | 4% |
| Electronic clinical decision support tool (e.g. Rx Files, e-Pocrates, Lexicomp, etc.) | 36% | 45% | 36% | 2% | 8% | 1% | 3% |
| Electronic list of all medications taken by an individual patient (accessible through a provincial/territorial drug information system) | 53% | 17% | 0% | 5% | 26% | 1% | 3% |
| Electronic warning for adverse drug interactions or contraindications | 96% | 24% | 15% | 0% | 1% | 0% | 0% |
| Electronic access to laboratory test results (available through provincial/territorial information systems) | 6% | 18% | 0% | 4% | 64% | 6% | 4% |
| Electronic transfer of clinical/patient medical information securely to/from other health professionals (by a direct internet based connection) | 17% | 6% | 0% | 2% | 65% | 7% | 4% |

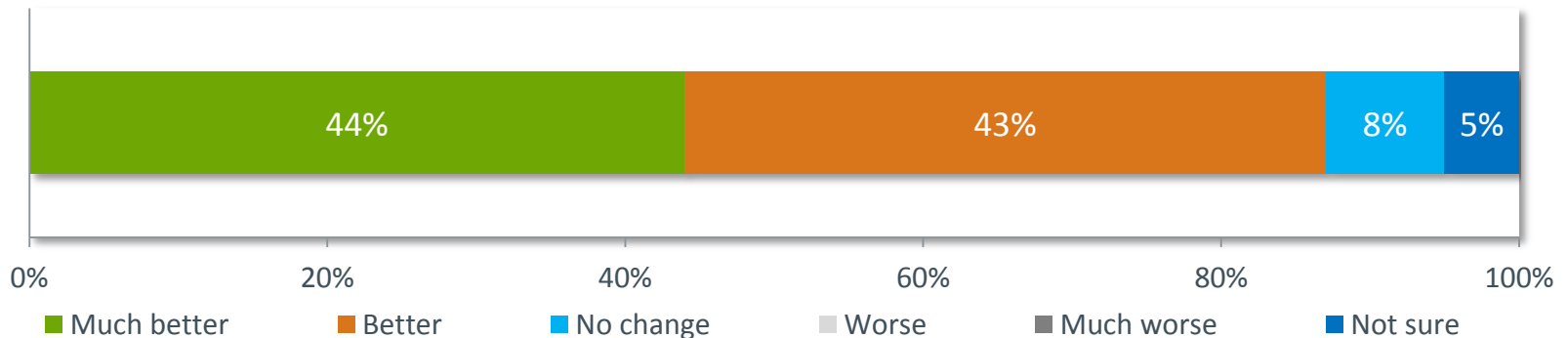
Base: All respondents (n=447)

Access to lab results - impact on productivity and quality

5h. Since having electronic access to laboratory test results (available through provincial/territorial information systems), the productivity at my community pharmacy practice has:



5i. How has the quality of the patient care you provide changed since having electronic access to laboratory test results (available through provincial/territorial information systems)?



Base: Respondents who are able to access to electronic laboratory test results through a provincial information system (n=102)

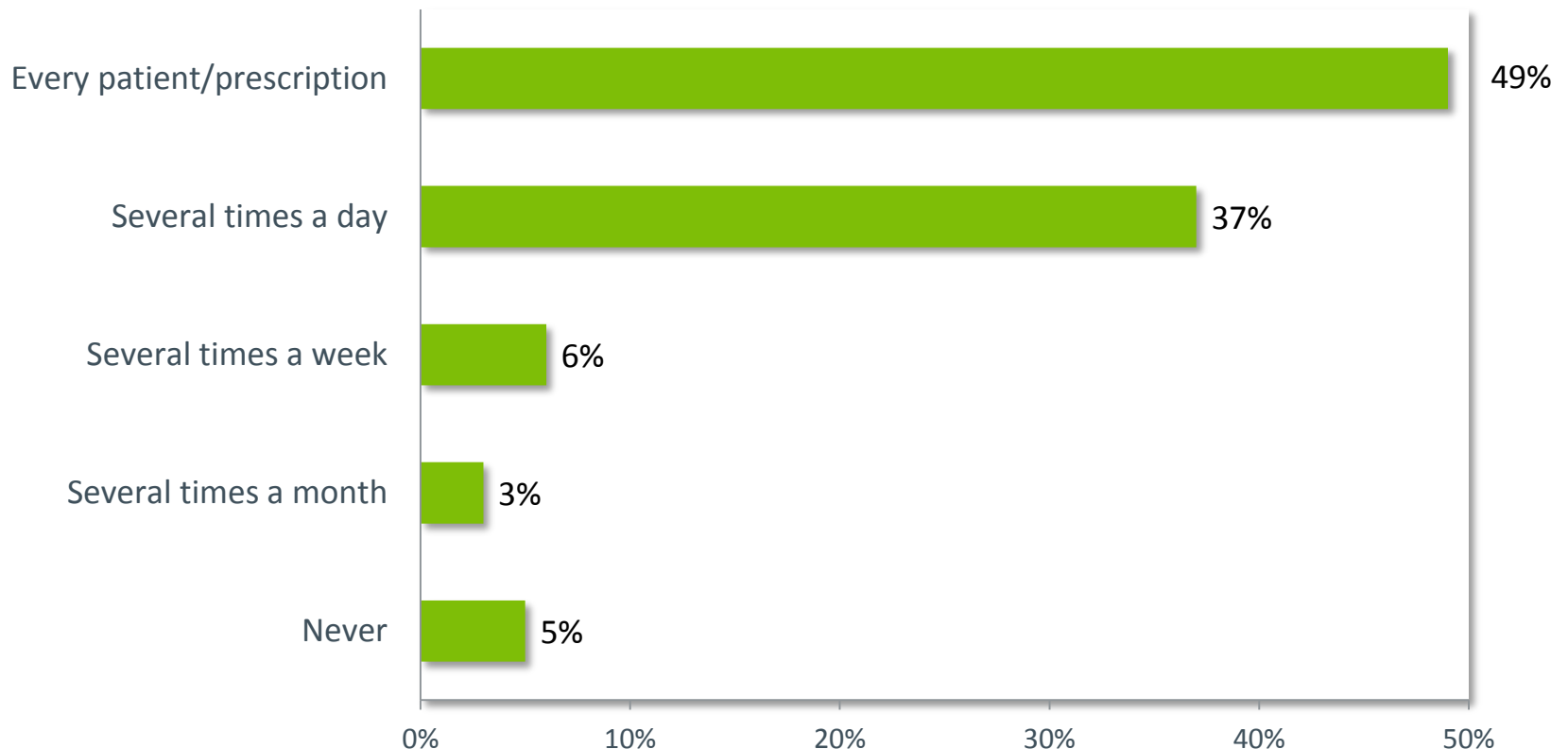
Drug Information Systems (DIS)

The analysis presented on DIS in the following slides includes only those provinces with fully implemented DIS systems: Alberta, British Columbia, Manitoba, Prince Edward Island, and Saskatchewan (n=192).

In questions where we wanted to compare the difference and impact on pharmacy practice following the availability of a provincial DIS, only respondents who had previously practiced in a non-provincial DIS environment were included (n=107).

Drug Information Systems (DIS) are accessed quite frequently

Q7. On average, how often does your pharmacy practice access an electronic provincial DIS?

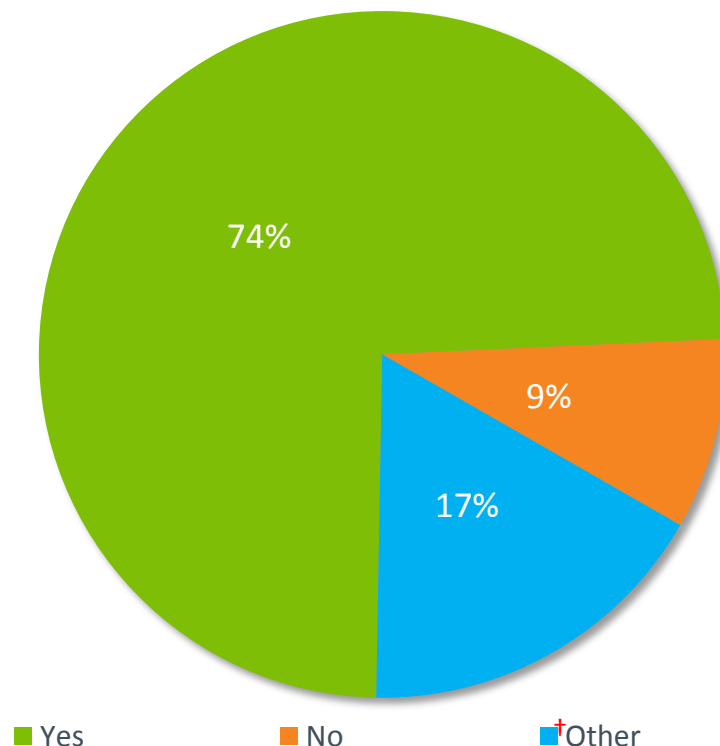


Base: Respondents practicing in those provinces* where a provincial DIS exists (n=192)

*Alberta, British Columbia, Manitoba, PEI and Saskatchewan

Two in three believe their system provides right info

Q9. Does the electronic provincial DIS provide you with the required patient information you need to inform your pharmacy practice?



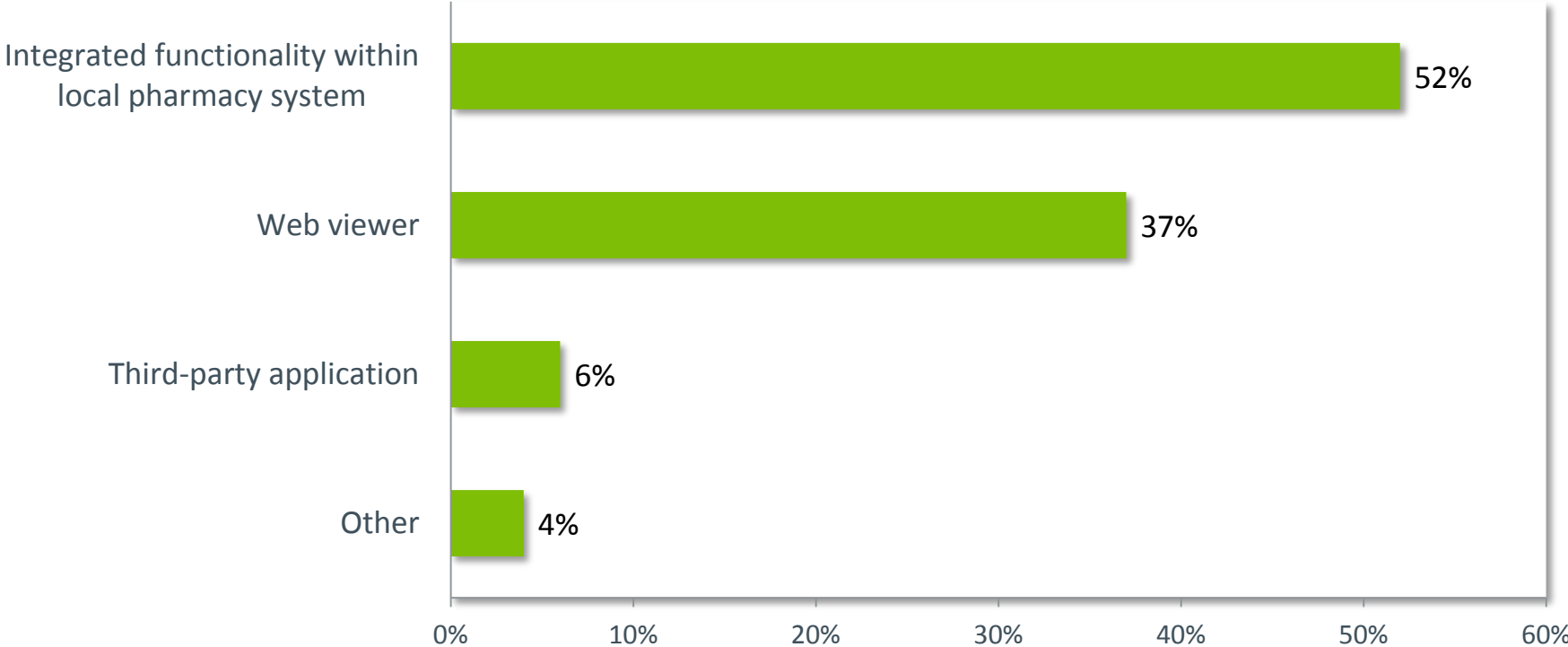
Base: Respondents practicing in those provinces* where a provincial DIS exists and have previously practiced in a non-DIS environment (n=107)

*Alberta, British Columbia, Manitoba, PEI and Saskatchewan

†Respondents who indicated some challenges with the ease of accessing the available information, its completeness and whether the information was up-to-date

Just over half are accessing their DIS via integrated system

Q10. How does your pharmacy practice access its electronic provincial DIS?



Base: Respondents practicing in those provinces where a provincial DIS* exists and have previously practiced in a non-DIS environment (n=107)

*Alberta, British Columbia, Manitoba, PEI and Saskatchewan

Informing clinical practice

Q11. Since the availability of an electronic provincial drug system in your practice, please estimate the percent improvement in the following:

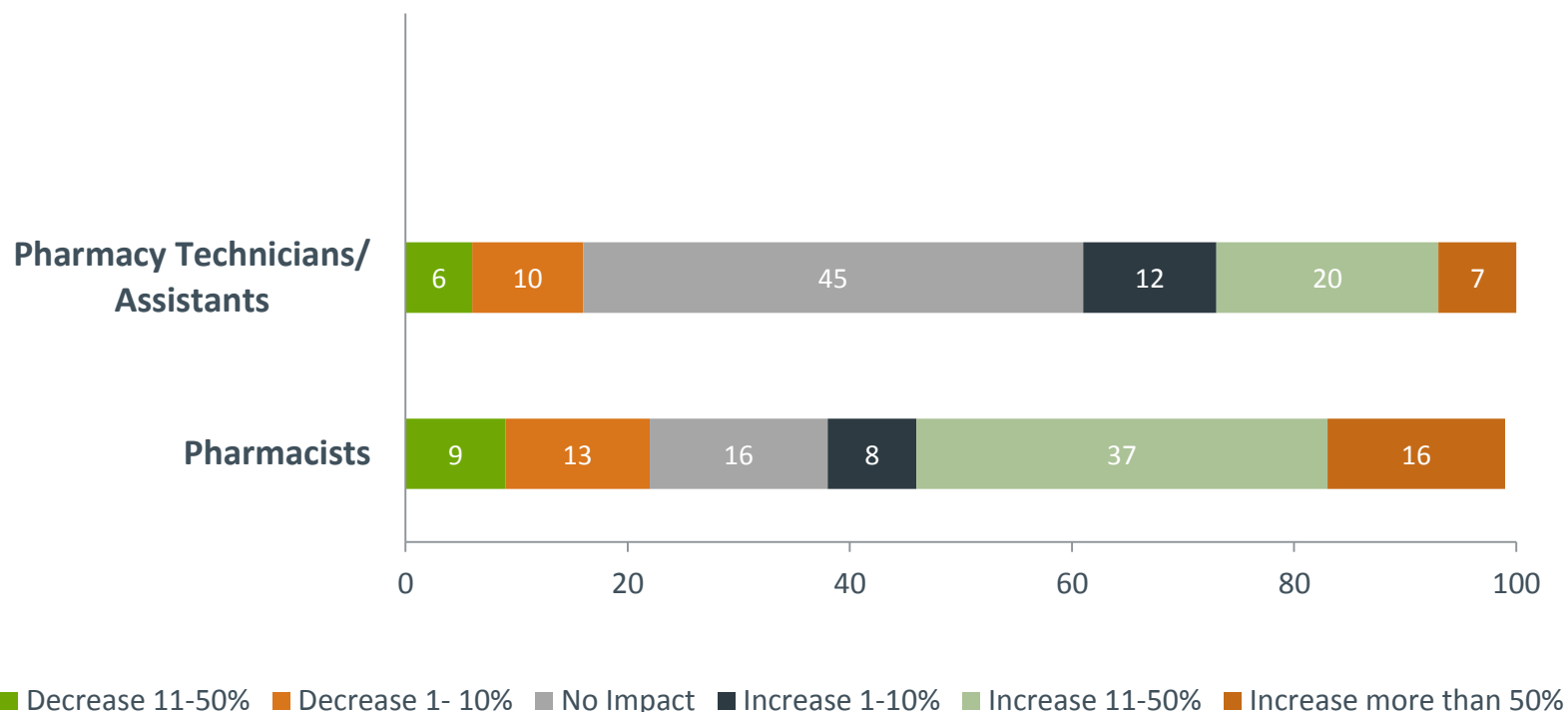
| | Decrease | None | ≤10% | 11-20% | 21 - 60% | More than 60% |
|--|----------|------|------|--------|----------|---------------|
| Access to patient information | | 1% | 8% | 5% | 13% | 73% |
| Pharmacist prescribing activities | | 5% | 9% | 3% | 16% | 67% |
| Conducting medication reviews | | 5% | 10% | 3% | 24% | 59% |
| Continuity of patient care | | 2% | 11% | 8% | 22% | 58% |
| Inappropriate medication use | 2% | 3% | 7% | 7% | 28% | 54% |
| Potential drug-related problems (e.g., drug-drug interaction, allergy, duplicate drug) | 2% | 3% | 7% | 7% | 28% | 54% |
| Performing a medication reconciliation | | 5% | 10% | 5% | 27% | 52% |
| Pharmacist/pharmacy technician/assistant satisfaction | 2% | 10% | 8% | 7% | 22% | 51% |
| Drug therapy monitoring and/or medication management | | 3% | 13% | 5% | 31% | 49% |
| Chronic disease management | | 11% | 12% | 8% | 31% | 39% |
| Provider communications | | 14% | 16% | 6% | 30% | 33% |
| Patient satisfaction | 1% | 20% | 18% | 9% | 32% | 20% |
| Drug cost management | | 42% | 21% | 9% | 11% | 17% |
| Patient compliance and adherence | | 33% | 16% | 11% | 25% | 15% |

Base: Respondents practicing in those provinces where a provincial DIS* exists and have previously practiced in a non-DIS environment (n=107)

*Alberta, British Columbia, Manitoba, PEI and Saskatchewan

Stronger sense of improved productivity for pharmacists

Q12. Since the availability of an electronic provincial drug system in your practice, please estimate the change in productivity in your pharmacy practice.

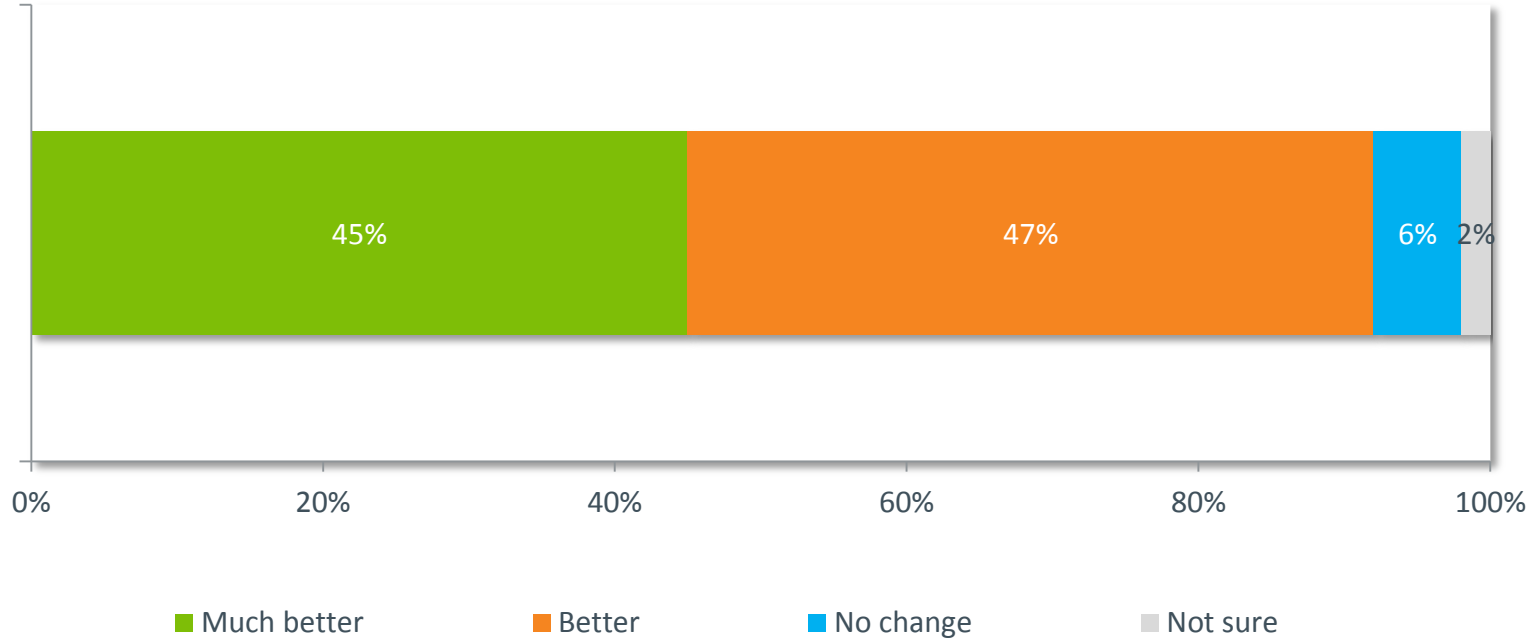


Base: Respondents practicing in those provinces where a provincial DIS* exists and have previously practiced in a non-DIS environment (n=107)

*Alberta, British Columbia, Manitoba, PEI and Saskatchewan

Improving quality of care

Q13. How has the quality of the patient care you provide changed since the availability of an electronic provincial DIS?



Base: Respondents practicing in those provinces where a provincial DIS* exists and have previously practiced in a non-DIS environment (n=107)
*Alberta, British Columbia, Manitoba, PEI and Saskatchewan

Electronic System Use in Prescribing Activities

Commissioned by



Prescription Sources

Q15. Please estimate the percentage of total weekly prescriptions received in your pharmacy practice from the sources listed below. *ONLY One answer per row .*

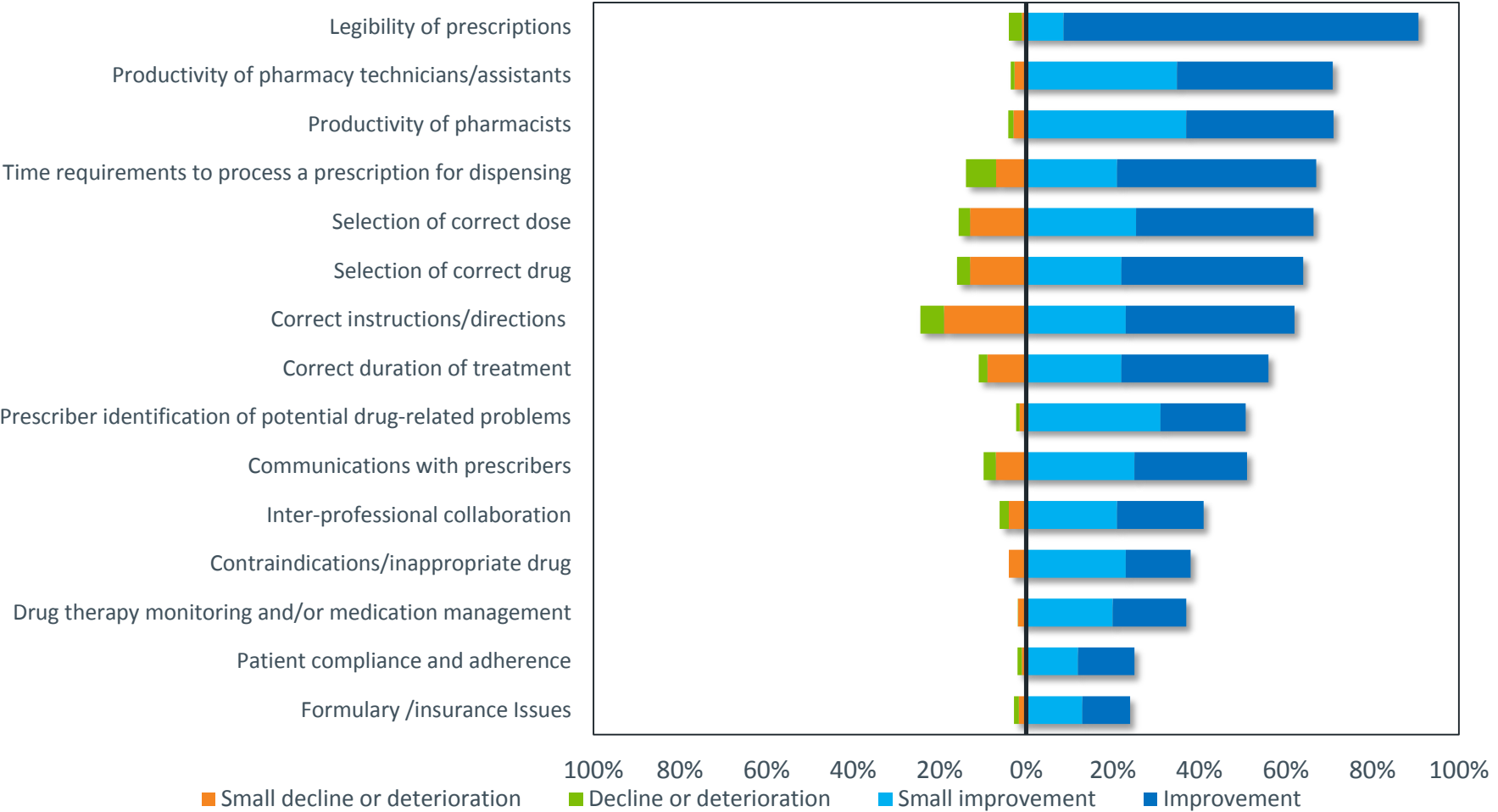
| | None | ≤10% | 11-20% | 21 - 60% | More than 60% |
|--|------|------|--------|----------|---------------|
| Telephone (e.g. physician/prescriber calls) | 1% | 82% | 12% | 4% | 0% |
| Handwritten and brought in by patient | 1% | 32% | 22% | 34% | 12% |
| Handwritten and faxed to pharmacy | 11% | 76% | 8% | 4% | 2% |
| Typed/Printed (i.e. computer generated & signed by prescriber) <u>brought in by patient</u> | 3% | 19% | 21% | 41% | 16% |
| Typed/Printed (i.e. computer generated, printed in the prescriber's office with an electronic signature, stamped signature or are signed and then <u>faxed</u> to the pharmacy) | 5% | 53% | 18% | 21% | 3% |
| Computer generated , printed with <i>electronic prescriber signature</i> and <u>brought in by patient</u> | 14% | 41% | 17% | 23% | 5% |
| Auto-fax (i.e. generated from physician system to pharmacy fax with some form of <i>e-signature</i>) | 44% | 37% | 7% | 9% | 3% |
| ePrescribing (i.e. from physician system directly to pharmacy practice management system) | 88% | 8% | 1% | 1% | 2% |
| Prescription accessed through an electronic provincial Drug Information System (DIS) | 91% | 7% | - | 1% | 1% |

Base: All respondents (n=447)

Early impact of moving from written based prescriptions

Q16. How has e-Prescribing and/or electronic medical record (EMR) generated e-prescriptions impacted the following, in your practice, as compared to hand-written or telephoned prescriptions?

Deteriorating *Improving*

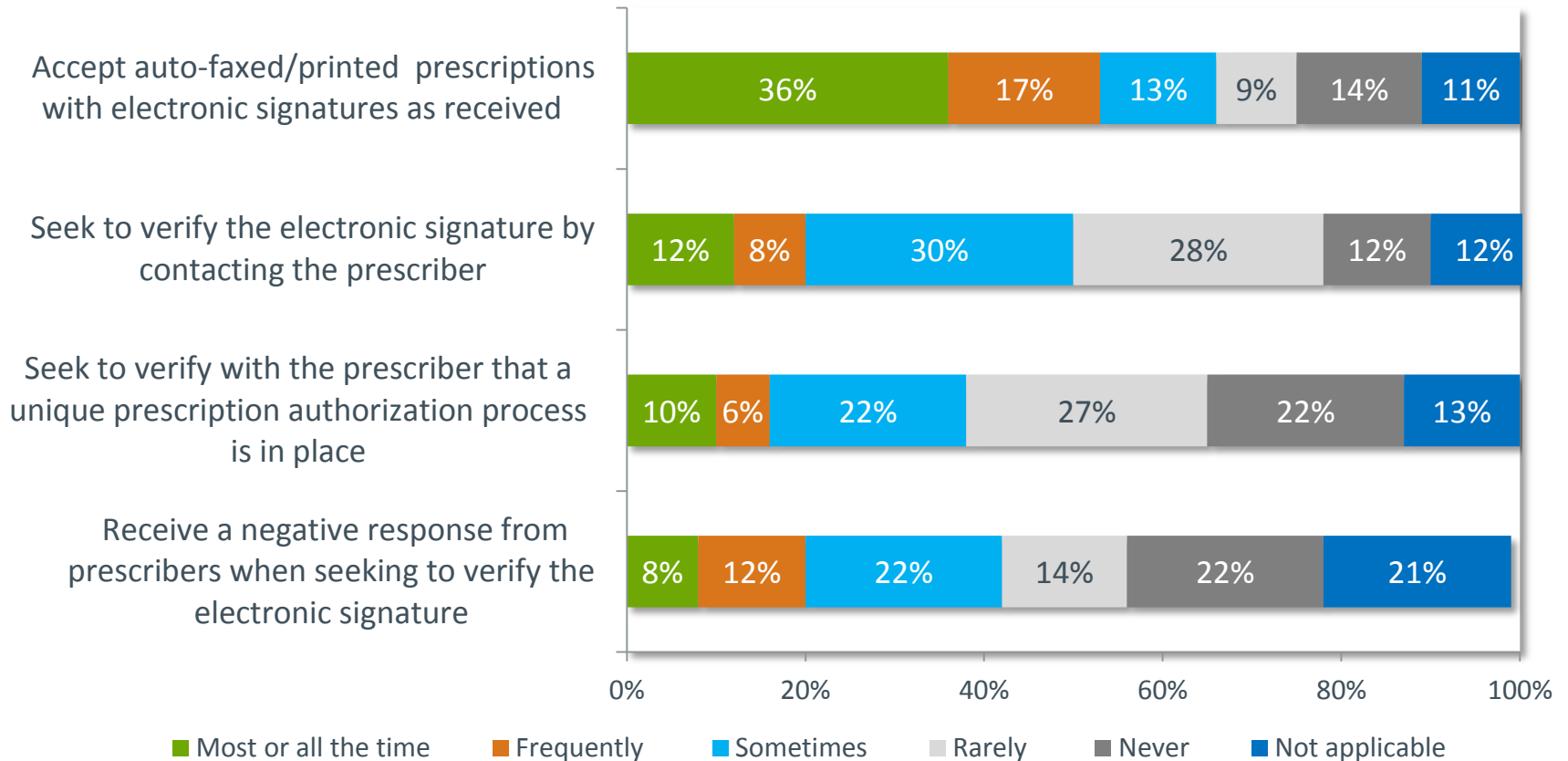


Base: various base sizes (n=340 to 353), depending on the respondents who were able to answer the question.

Variance in frequency of clarifying electronic processes

Q19. More and more prescribers are using EMRs to provide patient-care, including printing or 'auto-faxing' prescriptions with an electronic signature.

A prescriber's wet ink signature on a paper prescription can be directly examined by a pharmacist and in many cases compared against previous prescriptions from the same prescriber. Pharmacists must be assured that an EMR-generated prescription with an electronic signature, which is autofaxed/printed, is authentic, not fabricated, nor has been subsequently fraudulently altered. **In your pharmacy practice, do you:**



Base: All respondents (n=447)

Supporting clinical practice

Q22. From the total volume of prescriptions you dispense, please estimate the percentage of prescriptions in which you encounter the following issues:

| | None | ≤10% | 11-20% | 21 - 60% | More than 60% |
|---|------|------|--------|----------|---------------|
| Alerts related to expired medications | 58% | 31% | 3% | 6% | 3% |
| Duplicate alerts for the same issue (from different systems) | 26% | 36% | 10% | 16% | 12% |
| Alerts unrelated to the patient's condition | 25% | 57% | 10% | 5% | 3% |
| Absence of alerts for important issues | 17% | 69% | 6% | 5% | 3% |
| Excessive volume of alerts | 12% | 45% | 11% | 20% | 12% |
| Alerts that fail to account for appropriate drug combinations | 11% | 58% | 15% | 11% | 4% |
| Receive an alert from the electronic system that I use | 3% | 20% | 15% | 34% | 28% |

Base: All respondents (n=447)

Impacting patient care

Q23. Please estimate the percentage of medication alerts, flags, and warnings that result in:

| | None | ≤10% | 11-20% | 21 - 60% | More than 60% |
|---|------|------|--------|----------|---------------|
| An increase in patient monitoring | 6% | 62% | 14% | 15% | 2% |
| Modification to the prescription (e.g. dosage, frequency) | 6% | 76% | 10% | 7% | 2% |
| Change to medication (e.g. substitution) | 4% | 71% | 9% | 13% | 3% |
| Further investigation | 4% | 57% | 18% | 16% | 4% |
| Cancelling/stopping of the prescription | 4% | 83% | 8% | 3% | 1% |
| Override (i.e. ignore) | 3% | 21% | 10% | 35% | 32% |

Base: All respondents (n=447)

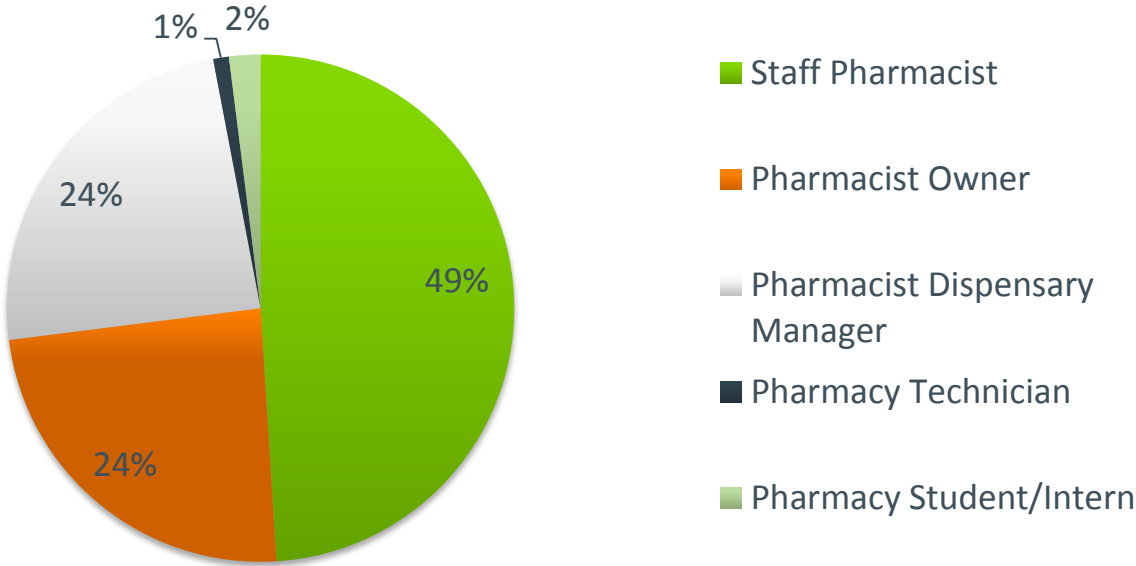
Respondent Profile - Additional Details

Commissioned by



Primary role

Q24. Please specify your primary role (i.e. title) within your main community pharmacy setting: *Check only ONE*



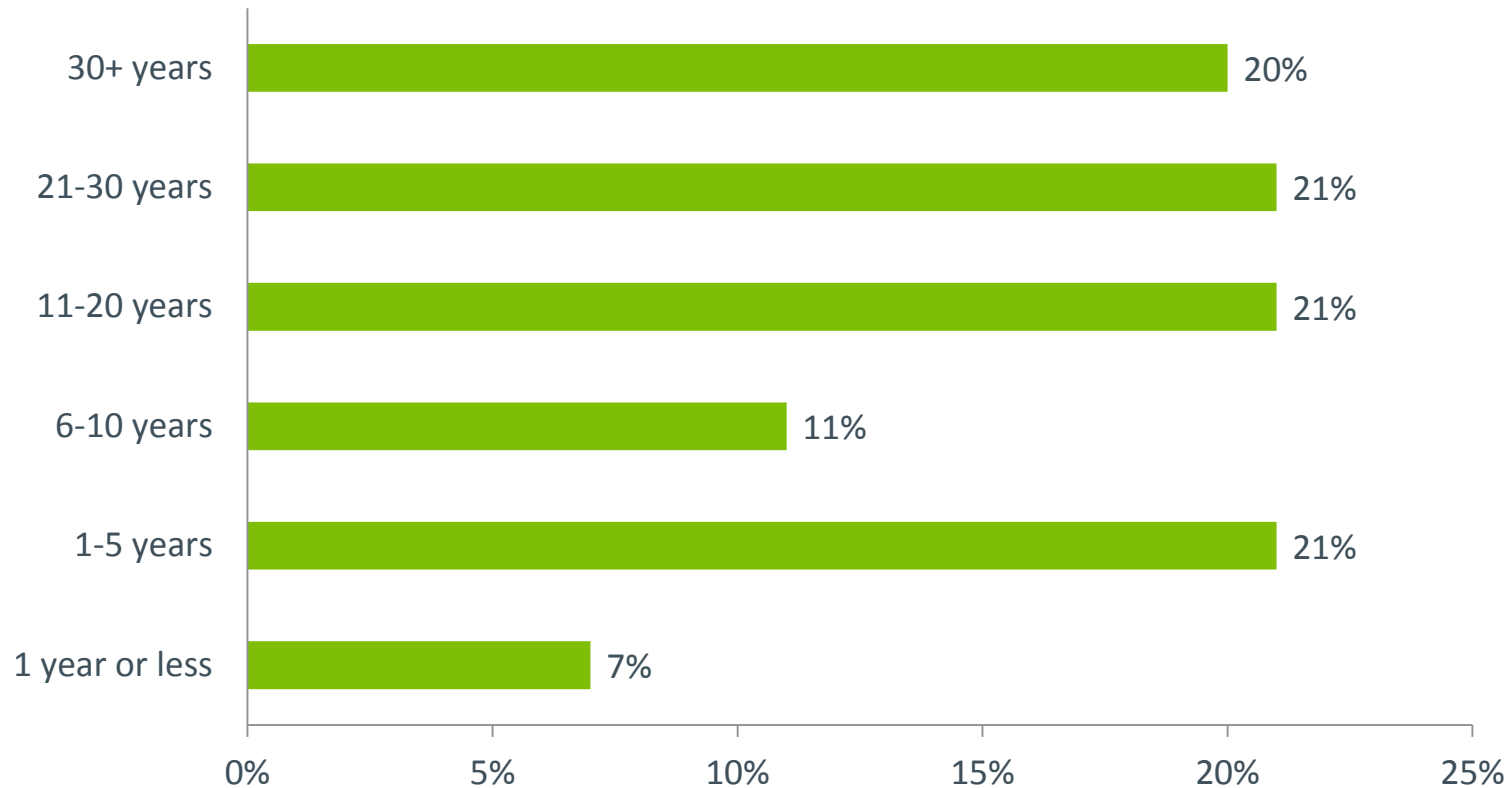
Q26. Please specify your current level of employment in your community pharmacy practice

- Full – time 76%
- Part- time 23%

Base: All respondents (n=447)

Years in Pharmacy Practice

Q25. Please specify your experience in community pharmacy practice:

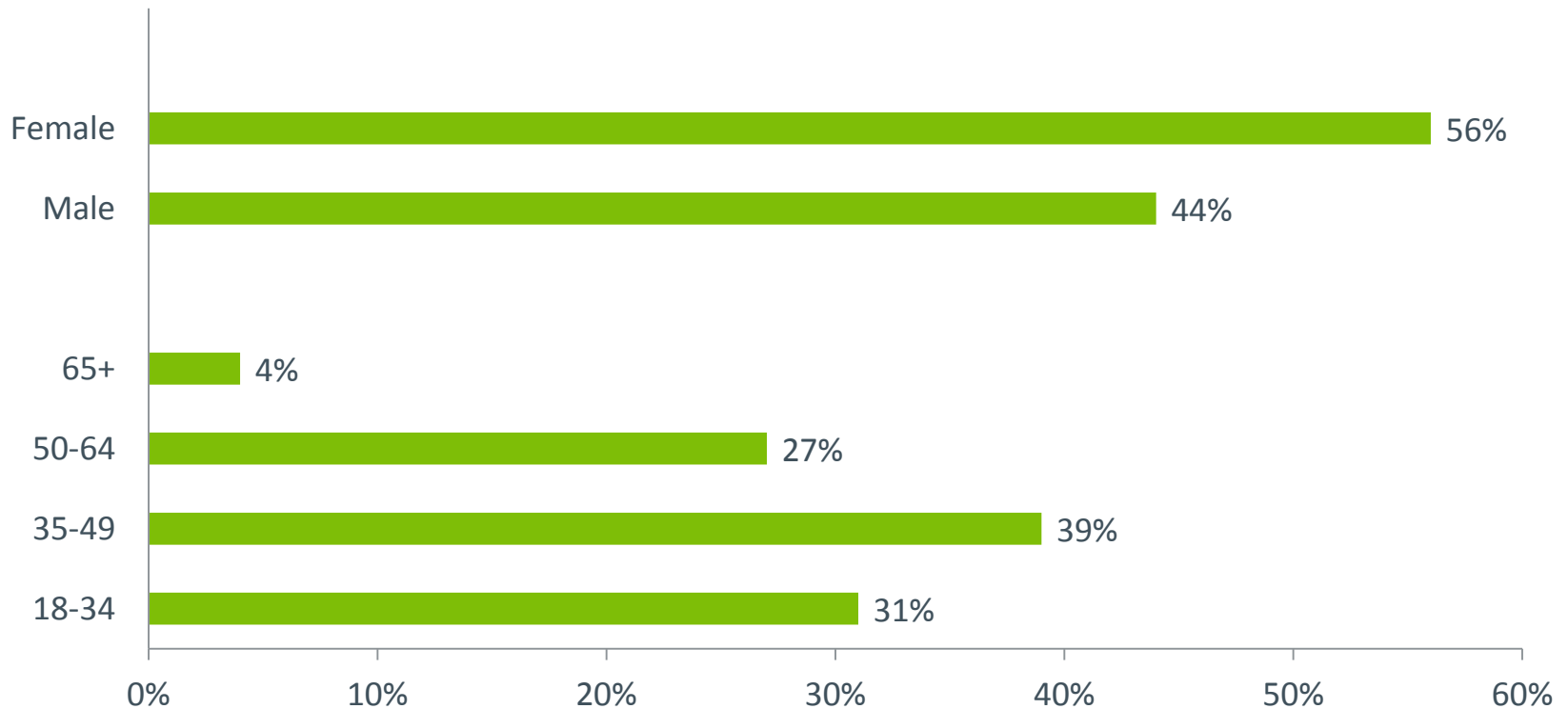


Base: All respondents (n=447)

Age and Gender Profile

Q29. Are you...?

Q28. Which age category do you belong to?



Base: All respondents (n=447)

For more information:

Megan Tam, Vice President

mtam@harrisdecima.com

Tel: 613-751-5070

Commissioned by



27

harrisdecima
A HARRIS INTERACTIVE COMPANY