

# 2018 MN Clinic HIT Survey Cross-tabulations

## ADOPTION AND USE OF ELECTRONIC HEALTH RECORD SYSTEMS AND HEALTH INFORMATION EXCHANGE

### Introduction

The Minnesota e-Health Initiative (Initiative) is a public-private collaborative whose vision is to accelerate the adoption and use of health information technology (e-health) in order to improve health care quality, increase patient safety, reduce health care costs, and improve public health (see <https://www.health.state.mn.us/facilities/ehealth/initiative/index.html>).

To help inform progress toward these goals and identify guidance needed by providers to meet this mandate, the Minnesota Department of Health (MDH) established a framework – the Minnesota e-Health Profile – for assessment and evaluation of electronic health record (EHR) adoption and use across multiple health settings that is based on the Minnesota Model. The Minnesota e-Health Profile is a series of online surveys of health care settings designed to uniformly collect and share the progress of Minnesota’s providers in adopting and implementing EHR systems, and exchanging electronic health information.

The assessment information is used to:

- Measure Minnesota’s status on adoption and use of technology and health information exchange;
- Identify gaps and barriers faced by clinics and their staff;
- Help develop programs and resources locally, statewide, and nationally; and
- Support community collaborative efforts.

These cross-tabulations provide question-by-question percent responses for all responding clinics, as well as breakouts by urban versus rural geography, and primary care versus specialty care type of practice. See the methodology for these analytic definitions. Responses to open-ended comments are included in Appendix A.

## Methodology

The data source for these cross-tabulations is the 2018 Minnesota Health Information Technology (HIT) Clinic Survey, conducted annually by the Minnesota Department of Health. Clinic(s) for the purpose of this study means any location where primary or specialty care ambulatory services are provided for a fee by one or more physicians in Minnesota.

The 47-question survey was administered as an online survey from September 18 to November 1, 2018. Invitations to participate were sent by e-mail to registered physician clinics; reminders to non-were sent periodically during fielding. All physician clinics in Minnesota were required to register and complete the survey under the Minnesota Statewide Quality Reporting and Measurement System (Minnesota Rules, Chapter 4654).

The unit of analysis used for these cross-tabulations is the clinic. Organizations that operate multiple clinics were allowed to attribute a single response for all clinic upon attestation that all clinics use the same EHR and processes of care. The 208 organizations that responded represent 1,314 of 1,571 Minnesota clinics, for a clinic response rate of 84%.

## Analytic Definitions:

- **EHR Clinic:** A clinic that has implemented an EHR in some or all areas of the clinic.
- **Non-Adopting Clinic:** A clinic that has not implemented an EHR or has purchased/begun installation but not yet implemented.
- **Geography:**
  - Urban (metropolitan or micropolitan; RUCA codes 1-6)
  - Rural (small town or rural; RUCA codes 7-10)

Designation is based on the Rural-Urban Commuting Area (RUCA) classifications, 2010 version. RUCA is a Census tract-based classification scheme that utilized the standard Bureau of Census Urbanized Area and Urban Cluster definitions with work commuting information to characterize each census tract.
- **Practice Type:**
  - Primary care (internal, family, geriatric, pediatric)
  - Specialty care (includes urgent care and clinics with limited services)

Definitions for terminology used in this survey can be found at:

<https://www.health.state.mn.us/facilities/ehealth/glossary/index.html>

More information on e-health assessment and activities in Minnesota can be found at:

<https://www.health.state.mn.us/facilities/ehealth/assessment/index.html>

Questions 1-4 address clinic name and address information and are not presented here.

## EHR Adoption

### 5. Which statement best describes your clinic's electronic health record (EHR) system?

|                                                                                 | Percent | Count |
|---------------------------------------------------------------------------------|---------|-------|
| We do not have an EHR (skip to Q36, non-adopters)                               | 1%      | 9     |
| We have purchased/begun installation of an EHR but are not yet using the system | 0%      | 0     |
| We have an EHR installed and in use for some of our clinic staff and providers  | 1%      | 10    |
| We have an EHR installed and in all (more than 90%) areas of our clinic         | 99%     | 1,295 |

### Counts for questions 6-35 (= EHR users)

|                                                              | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------------------------------|-------|-------|-------|---------|-----------|
| EHR is installed and in use for at least some of the clinics | 1,305 | 1,096 | 209   | 648     | 657       |

### 6. Does your clinic currently use an ONC certified EHR system?

|                                     | Total | Urban | Rural | Primary | Specialty |
|-------------------------------------|-------|-------|-------|---------|-----------|
| Yes, 2015 ONC Edition Certification | 78%   | 78%   | 77%   | 82%     | 73%       |
| Yes, 2014 ONC Edition Certification | 14%   | 13%   | 19%   | 13%     | 16%       |
| Yes, not sure which edition         | 5%    | 6%    | 3%    | 4%      | 6%        |
| We do not use an ONC-certified EHR  | 0%    | 0%    | 0%    | 0%      | 0%        |

### 7. Please select your clinic's current EHR system vendor from the drop-down list below:

|                | Total | Urban | Rural | Primary | Spec |
|----------------|-------|-------|-------|---------|------|
| Epic           | 58%   | 58%   | 60%   | 69%     | 47%  |
| eClinicalWorks | 9%    | 10%   | 3%    | 10%     | 9%   |
| Allscripts     | 8%    | 8%    | 6%    | 7%      | 9%   |
| NextGen        | 4%    | 5%    | 3%    | 1%      | 7%   |
| Greenway       | 3%    | 4%    | 0%    | 0%      | 6%   |
| Meditech       | 2%    | 1%    | 8%    | 4%      | 1%   |
| Cerner         | 2%    | 2%    | 1%    | 1%      | 3%   |
| GE Centricity  | 2%    | 2%    | 4%    | 3%      | 1%   |
| Other          | 11%   | 10%   | 15%   | 5%      | 17%  |

## EHR Utilization

8. Please indicate how often the following electronic clinical decision support tools are used by your clinic's providers and staff to support patient care, either through the EHR or its associated practice management system?

|                                                                                               | Total | Urban | Rural | Primary | Specialty |
|-----------------------------------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| 8a. Automated reminders for missing or overdue labs and tests                                 |       |       |       |         |           |
| Used routinely                                                                                | 63%   | 63%   | 65%   | 77%     | 50%       |
| Used occasionally                                                                             | 18%   | 19%   | 11%   | 12%     | 23%       |
| Do not use                                                                                    | 13%   | 12%   | 21%   | 9%      | 18%       |
| Not applicable                                                                                | 6%    | 6%    | 3%    | 2%      | 10%       |
| 8b. Chronic disease care plans and flow sheets                                                |       |       |       |         |           |
| Used routinely                                                                                | 59%   | 60%   | 57%   | 68%     | 50%       |
| Used occasionally                                                                             | 22%   | 21%   | 26%   | 23%     | 21%       |
| Do not use                                                                                    | 10%   | 9%    | 11%   | 8%      | 11%       |
| Not applicable                                                                                | 10%   | 10%   | 5%    | 0%      | 19%       |
| 8c. Clinical guidelines based on patient problem list, gender, and age                        |       |       |       |         |           |
| Used routinely                                                                                | 72%   | 73%   | 67%   | 79%     | 65%       |
| Used occasionally                                                                             | 21%   | 19%   | 29%   | 17%     | 24%       |
| Do not use                                                                                    | 6%    | 7%    | 3%    | 4%      | 8%        |
| Not applicable                                                                                | 2%    | 2%    | 0%    | 0%      | 3%        |
| 8d. Medication guides/alerts                                                                  |       |       |       |         |           |
| Used routinely                                                                                | 94%   | 94%   | 96%   | 96%     | 92%       |
| Used occasionally                                                                             | 4%    | 5%    | 3%    | 3%      | 6%        |
| Do not use                                                                                    | 1%    | 1%    | 1%    | 1%      | 1%        |
| Not applicable                                                                                | 0%    | 0%    | 0%    | 0%      | 1%        |
| 8e. Patient-specific or condition-specific reminders (e.g., foot exams for diabetic patients) |       |       |       |         |           |
| Used routinely                                                                                | 72%   | 70%   | 78%   | 85%     | 59%       |
| Used occasionally                                                                             | 15%   | 17%   | 8%    | 10%     | 21%       |
| Do not use                                                                                    | 8%    | 9%    | 7%    | 4%      | 12%       |
| Not applicable                                                                                | 5%    | 4%    | 7%    | 1%      | 8%        |
| 8f. Preventive care services reminders (e.g., immunizations, screenings)                      |       |       |       |         |           |
| Used routinely                                                                                | 75%   | 73%   | 84%   | 88%     | 61%       |
| Used occasionally                                                                             | 12%   | 13%   | 7%    | 8%      | 16%       |
| Do not use                                                                                    | 4%    | 4%    | 3%    | 3%      | 5%        |
| Not applicable                                                                                | 9%    | 10%   | 6%    | 1%      | 18%       |

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**9. For which conditions does your clinic use clinical decision support tools? Select all that apply.**

|                            | Total | Urban | Rural | Primary | Specialty |
|----------------------------|-------|-------|-------|---------|-----------|
| 9a. Diabetes               | 74%   | 72%   | 85%   | 89%     | 59%       |
| 9b. Prediabetes            | 27%   | 23%   | 49%   | 40%     | 14%       |
| 9c. High blood pressure    | 69%   | 68%   | 77%   | 84%     | 55%       |
| 9d. High cholesterol       | 58%   | 58%   | 63%   | 75%     | 42%       |
| 9e. Chronic kidney disease | 27%   | 23%   | 49%   | 38%     | 17%       |
| 9f. None of the above      | 9%    | 9%    | 7%    | 4%      | 12%       |
| 9g. Not applicable         | 12%   | 13%   | 7%    | 3%      | 21%       |

**10. What other types decision support tools does your clinic use (or would like to use) to support patient care?**

See Appendix A.

**11. Does your clinic document the existence of a patient's advance directive in your EHR?**

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 86%   | 84%   | 92%   | 94%     | 77%       |
| No (Skip to Q14)       | 11%   | 12%   | 6%    | 4%      | 18%       |
| Not sure (Skip to Q14) | 3%    | 4%    | 1%    | 1%      | 5%        |

**12. What percent of your clinic's patients 65 years of age and older have an advance directive in your EHR?**

Base = "Yes" to Q11

|                                      | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------|-------|-------|-------|---------|-----------|
| 80-100%                              | 5%    | 5%    | 2%    | 3%      | 6%        |
| 50-79%                               | 6%    | 5%    | 10%   | 5%      | 7%        |
| 25-49%                               | 43%   | 40%   | 55%   | 47%     | 37%       |
| Less than 25%                        | 21%   | 24%   | 6%    | 19%     | 24%       |
| Not collected or not able to collect | 26%   | 26%   | 26%   | 26%     | 26%       |

**13. How do you store advance directive information?**

Base = "Yes" to Q11

|                                                                                     | Total | Urban | Rural | Primary | Specialty |
|-------------------------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| Incorporated into our EHR, but are not kept in a consistent and separate place      | 7%    | 6%    | 10%   | 5%      | 9%        |
| Electronically accessible - stored in readily accessible/consistent part of the EHR | 92%   | 93%   | 87%   | 94%     | 90%       |
| Paper documents                                                                     | 1%    | 0%    | 3%    | 1%      | 1%        |
| Not sure                                                                            | 1%    | 1%    | 0%    | 1%      | 0%        |

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**14. For what percentage of patients does your clinic capture demographic information in the EHR or its associated practice management system?**

|                                      | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------|-------|-------|-------|---------|-----------|
| <b>14a. Race</b>                     |       |       |       |         |           |
| 80-100%                              | 98%   | 98%   | 98%   | 99%     | 98%       |
| 50-79%                               | 0%    | 0%    | 0%    | 0%      | 1%        |
| 25-49%                               | 0%    | 0%    | 0%    | 0%      | 0%        |
| Less than 25%                        | 0%    | 0%    | 0%    | 0%      | 0%        |
| Not collected or not able to collect | 1%    | 1%    | 1%    | 1%      | 1%        |
| <b>14b. Ethnicity</b>                |       |       |       |         |           |
| 80-100%                              | 94%   | 93%   | 97%   | 93%     | 95%       |
| 50-79%                               | 1%    | 1%    | 0%    | 0%      | 1%        |
| 25-49%                               | 4%    | 4%    | 1%    | 6%      | 2%        |
| Less than 25%                        | 0%    | 0%    | 0%    | 0%      | 0%        |
| Not collected or not able to collect | 1%    | 1%    | 1%    | 1%      | 2%        |
| <b>14c. Country of origin</b>        |       |       |       |         |           |
| 80-100%                              | 71%   | 72%   | 68%   | 73%     | 69%       |
| 50-79%                               | 7%    | 6%    | 14%   | 9%      | 6%        |
| 25-49%                               | 2%    | 1%    | 6%    | 3%      | 1%        |
| Less than 25%                        | 2%    | 2%    | 5%    | 3%      | 2%        |
| Not collected or not able to collect | 17%   | 19%   | 7%    | 11%     | 23%       |
| <b>14d. Preferred language</b>       |       |       |       |         |           |
| 80-100%                              | 98%   | 98%   | 95%   | 98%     | 97%       |
| 50-79%                               | 1%    | 1%    | 0%    | 0%      | 2%        |
| 25-49%                               | 0%    | 0%    | 2%    | 1%      | 0%        |
| Less than 25%                        | 1%    | 0%    | 1%    | 0%      | 1%        |
| Not collected or not able to collect | 1%    | 0%    | 1%    | 1%      | 0%        |
| <b>14e. Insurance type</b>           |       |       |       |         |           |
| 80-100%                              | 99%   | 99%   | 98%   | 99%     | 99%       |
| 50-79%                               | 1%    | 1%    | 0%    | 0%      | 1%        |
| 25-49%                               | 0%    | 0%    | 0%    | 0%      | 0%        |
| Less than 25%                        | 0%    | 0%    | 0%    | 0%      | 0%        |
| Not collected or not able to collect | 0%    | 0%    | 1%    | 1%      | 0%        |
| <b>14f. Sexual orientation</b>       |       |       |       |         |           |
| 80-100%                              | 30%   | 28%   | 43%   | 31%     | 30%       |
| 50-79%                               | 2%    | 1%    | 2%    | 2%      | 1%        |
| 25-49%                               | 2%    | 2%    | 1%    | 3%      | 1%        |
| Less than 25%                        | 18%   | 17%   | 21%   | 26%     | 10%       |
| Not collected or not able to collect | 49%   | 52%   | 33%   | 38%     | 59%       |

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|                                      | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------|-------|-------|-------|---------|-----------|
| 14g. Gender identity                 |       |       |       |         |           |
| 80-100%                              | 48%   | 47%   | 52%   | 46%     | 50%       |
| 50-79%                               | 2%    | 1%    | 2%    | 2%      | 1%        |
| 25-49%                               | 1%    | 1%    | 1%    | 1%      | 1%        |
| Less than 25%                        | 15%   | 14%   | 20%   | 19%     | 10%       |
| Not collected or not able to collect | 35%   | 37%   | 25%   | 32%     | 38%       |

**15. Does your EHR and/or its associated practice management system have the ability to capture and report more than one race per patient?**

|          | Total | Urban | Rural | Primary | Specialty |
|----------|-------|-------|-------|---------|-----------|
| Yes      | 87%   | 86%   | 87%   | 92%     | 81%       |
| No       | 11%   | 11%   | 11%   | 6%      | 16%       |
| Not sure | 2%    | 2%    | 3%    | 2%      | 2%        |

**16. Does your EHR or its associated practice management system have the ability to capture and report granular (detailed) ethnicity information?**

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 64%   | 62%   | 73%   | 69%     | 59%       |
| No (skip to Q18)       | 30%   | 32%   | 19%   | 27%     | 32%       |
| Not sure (skip to Q18) | 6%    | 6%    | 9%    | 3%      | 10%       |

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**17. For approximately what percent of patients are you capturing detailed ethnicity information?**

Base = "Yes" to Q16

|               | Total | Urban | Rural | Primary | Specialty |
|---------------|-------|-------|-------|---------|-----------|
| 80-100%       | 72%   | 73%   | 66%   | 71%     | 73%       |
| 50-79%        | 3%    | 3%    | 3%    | 2%      | 4%        |
| 25-49%        | 6%    | 7%    | 1%    | 5%      | 7%        |
| Less than 25% | 5%    | 4%    | 8%    | 3%      | 7%        |
| Not sure      | 15%   | 13%   | 22%   | 20%     | 9%        |

**18. Is your clinic able to generate at least one report from the data in your EHR that lists patients by a specific condition (e.g., for disease management, care coordination, research, etc.)?**

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 98%   | 98%   | 97%   | 99%     | 96%       |
| No (skip to Q21)       | 1%    | 1%    | 0%    | 0%      | 1%        |
| Not sure (skip to Q21) | 2%    | 1%    | 2%    | 1%      | 2%        |

**19. For which of the following chronic conditions does your clinic regularly (at least 4 times per year) generate patient lists? Select all that apply.**

Base = "Yes" to Q18

|                          | Total | Urban | Rural | Primary | Specialty |
|--------------------------|-------|-------|-------|---------|-----------|
| 19a. Diabetes            | 76%   | 74%   | 85%   | 91%     | 61%       |
| 19b. Prediabetes         | 19%   | 16%   | 32%   | 27%     | 10%       |
| 19c. High blood pressure | 66%   | 65%   | 69%   | 81%     | 51%       |
| 19d. High cholesterol    | 39%   | 38%   | 44%   | 49%     | 29%       |
| 19e. None of the above   | 24%   | 26%   | 15%   | 9%      | 39%       |
| 19f. Other               | 30%   | 31%   | 27%   | 28%     | 32%       |

See Appendix A for 19f "other" responses.

|                                                               | Total | Urban | Rural | Primary | Specialty |
|---------------------------------------------------------------|-------|-------|-------|---------|-----------|
| 20a. Create benchmarks and/or goals for clinical priorities   | 85%   | 86%   | 80%   | 94%     | 76%       |
| 20b. Monitor changes in patient outcomes                      | 83%   | 84%   | 79%   | 91%     | 75%       |
| 20c. Provide reports to providers (e.g., clinical dashboards) | 92%   | 92%   | 91%   | 95%     | 88%       |
| 20d. Track clinical outcomes                                  | 78%   | 79%   | 78%   | 90%     | 67%       |
| 20e. Support care coordination                                | 85%   | 85%   | 85%   | 91%     | 80%       |
| 20f. Conduct business analytics                               | 83%   | 83%   | 81%   | 86%     | 80%       |
| 20g. Support professional development activities              | 66%   | 67%   | 59%   | 71%     | 61%       |



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**21. Does your clinic or health system use demographic information (e.g., race, age, gender) to assess disparities in clinical outcomes based on those patient characteristics?**

|          | Total | Urban | Rural | Primary | Specialty |
|----------|-------|-------|-------|---------|-----------|
| Yes      | 55%   | 57%   | 42%   | 63%     | 47%       |
| No       | 31%   | 29%   | 43%   | 25%     | 37%       |
| Not sure | 14%   | 14%   | 15%   | 12%     | 16%       |

**23. Please indicate the extent to which you agree that your EHR system has helped providers in your clinic...**

|                                                                                        | Total | Urban | Rural | Primary | Specialty |
|----------------------------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| <b>23a. Enhance patient care in your clinic</b>                                        |       |       |       |         |           |
| Agree                                                                                  | 77%   | 75%   | 84%   | 88%     | 66%       |
| Agree somewhat                                                                         | 18%   | 18%   | 13%   | 10%     | 25%       |
| Somewhat Disagree                                                                      | 4%    | 4%    | 3%    | 1%      | 7%        |
| Disagree                                                                               | 1%    | 1%    | 0%    | 1%      | 1%        |
| Not sure or not applicable                                                             | 1%    | 1%    | 0%    | 0%      | 2%        |
| <b>23b. Order fewer tests or images due to better availability of existing results</b> |       |       |       |         |           |
| Agree                                                                                  | 66%   | 68%   | 58%   | 72%     | 61%       |
| Agree somewhat                                                                         | 24%   | 23%   | 32%   | 24%     | 25%       |
| Somewhat Disagree                                                                      | 2%    | 2%    | 3%    | 2%      | 3%        |
| Disagree                                                                               | 2%    | 2%    | 2%    | 1%      | 3%        |
| Not sure or not applicable                                                             | 5%    | 5%    | 5%    | 1%      | 9%        |
| <b>23c. Coordinate care with your patients' other health care providers</b>            |       |       |       |         |           |
| Agree                                                                                  | 67%   | 67%   | 65%   | 74%     | 59%       |
| Agree somewhat                                                                         | 29%   | 28%   | 31%   | 23%     | 34%       |
| Somewhat Disagree                                                                      | 2%    | 2%    | 3%    | 2%      | 3%        |
| Disagree                                                                               | 1%    | 1%    | 1%    | 1%      | 2%        |
| Not sure or not applicable                                                             | 1%    | 2%    | 0%    | 1%      | 2%        |

## Privacy/Patient Consent

**24. Does your clinic's EHR allow patients to define permissions for who should have access to their health record and under what circumstances?**

|          | Total | Urban | Rural | Primary | Specialty |
|----------|-------|-------|-------|---------|-----------|
| Yes      | 87%   | 89%   | 79%   | 86%     | 88%       |
| No       | 9%    | 8%    | 16%   | 11%     | 7%        |
| Not sure | 4%    | 3%    | 5%    | 3%      | 4%        |

**25. How does your clinic track patient consents?**

|                                                                                     | Total | Urban | Rural | Primary | Specialty |
|-------------------------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| Consents are tracked electronically (with check boxes, electronic signatures, etc.) | 37%   | 35%   | 44%   | 41%     | 32%       |
| Scanned paper consents - Signed papers are scanned into the EHR                     | 49%   | 49%   | 49%   | 44%     | 54%       |
| Paper consents only - Signed consents are filed as paper                            | 0%    | 0%    | 0%    | 0%      | 1%        |
| Both electronic and scanned                                                         | 14%   | 16%   | 6%    | 15%     | 13%       |

## Health Information Exchange

**26. When a patient was seen by a provider outside of your organization or health system, to what extent do providers at your clinic have the necessary clinical information electronically available from those outside providers (not including electronic fax or non-secure email)?**

|                 | Total | Urban | Rural | Primary | Specialty |
|-----------------|-------|-------|-------|---------|-----------|
| Routinely       | 56%   | 56%   | 60%   | 69%     | 44%       |
| Sometimes       | 24%   | 22%   | 30%   | 20%     | 27%       |
| Rarely or never | 14%   | 15%   | 10%   | 10%     | 19%       |
| Do not know     | 6%    | 7%    | 0%    | 1%      | 11%       |

**27. When your clinic's patients need to see a provider outside of your organization or health system, to what extent your clinic routinely send the necessary clinical information electronically (not including electronic fax or non-secure email)?**

|                 | Total | Urban | Rural | Primary | Specialty |
|-----------------|-------|-------|-------|---------|-----------|
| Routinely       | 56%   | 53%   | 71%   | 67%     | 45%       |
| Sometimes       | 20%   | 21%   | 17%   | 19%     | 22%       |
| Rarely or never | 18%   | 19%   | 12%   | 14%     | 23%       |
| Do not know     | 6%    | 7%    | 0%    | 1%      | 11%       |

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**28. Do you make referrals to health education programs (e.g., Diabetes Self-Management Program, Chronic Disease Self-Management Program, Diabetes Prevention Program) outside of your organization?**

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 63%   | 62%   | 70%   | 72%     | 55%       |
| No (SKIP TO Q32)       | 25%   | 26%   | 17%   | 17%     | 32%       |
| Not sure (SKIP TO Q32) | 12%   | 12%   | 13%   | 11%     | 14%       |

**29. To what extent are those referrals sent electronically from your clinic's EHR (not including electronic fax or non-secure email)?**

Base = "Yes" to Q28

|                 | Total | Urban | Rural | Primary | Specialty |
|-----------------|-------|-------|-------|---------|-----------|
| Routinely       | 28%   | 25%   | 45%   | 35%     | 20%       |
| Sometimes       | 22%   | 23%   | 17%   | 20%     | 25%       |
| Rarely or never | 34%   | 34%   | 36%   | 31%     | 38%       |
| Do not know     | 15%   | 18%   | 2%    | 14%     | 17%       |

**30. To what extent are referrals confirmed electronically from your clinic's EHR (not including electronic fax or non-secure email)?**

Base = "Yes" to Q28

|                 | Total | Urban | Rural | Primary | Specialty |
|-----------------|-------|-------|-------|---------|-----------|
| Routinely       | 22%   | 19%   | 37%   | 25%     | 19%       |
| Sometimes       | 17%   | 18%   | 12%   | 15%     | 19%       |
| Rarely or never | 45%   | 45%   | 47%   | 45%     | 45%       |
| Do not know     | 16%   | 18%   | 3%    | 15%     | 17%       |

**31. To what extent is information from those referrals reported back to your clinic (i.e., "closed loop") electronically to your clinic's EHR (not including electronic fax or non-secure email)?**

Base = "Yes" to Q28

|                 | Total | Urban | Rural | Primary | Specialty |
|-----------------|-------|-------|-------|---------|-----------|
| Routinely       | 16%   | 13%   | 29%   | 19%     | 11%       |
| Sometimes       | 35%   | 37%   | 25%   | 33%     | 36%       |
| Rarely or never | 33%   | 31%   | 42%   | 33%     | 34%       |
| Do not know     | 17%   | 20%   | 3%    | 15%     | 19%       |

2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

**32. Please describe the barriers your clinic faces to ensure providers have needed patient information to support patient outcomes. This can include types of information (e.g., labs, images, notes), ability to exchange electronically, and other barriers.**

See Appendix A.

|                                                        | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------------------------|-------|-------|-------|---------|-----------|
| 80-100% of patients who require referral or transition | 37%   | 36%   | 40%   | 43%     | 31%       |
| 50-79% of patients who referral or transition          | 17%   | 16%   | 21%   | 18%     | 16%       |
| 25-49% of patients who referral or transition          | 14%   | 15%   | 7%    | 13%     | 15%       |
| Less than 25% of patients who referral or transition   | 16%   | 17%   | 13%   | 14%     | 18%       |
| We do not have this functionality                      | 6%    | 6%    | 7%    | 2%      | 10%       |
| Not sure                                               | 11%   | 10%   | 12%   | 10%     | 11%       |

**34. For each type of clinical information received electronically from providers or sources outside your health system/organization, how do you usually integrate the information into your EHR? Select one method for each type of information.**

|                                                        | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------------------------|-------|-------|-------|---------|-----------|
| <b>34a. summary of care record</b>                     |       |       |       |         |           |
| Usually data are manually entered into the EHR         | 39%   | 40%   | 34%   | 36%     | 42%       |
| Usually data are automatically integrated into the EHR | 50%   | 48%   | 61%   | 58%     | 42%       |
| Not applicable                                         | 3%    | 3%    | 1%    | 2%      | 3%        |
| Not sure                                               | 8%    | 8%    | 4%    | 3%      | 12%       |
| <b>34b. lab results</b>                                |       |       |       |         |           |
| Usually data are manually entered into the EHR         | 41%   | 38%   | 56%   | 42%     | 39%       |
| Usually data are automatically integrated into the EHR | 48%   | 50%   | 39%   | 53%     | 43%       |
| Not applicable                                         | 5%    | 5%    | 4%    | 3%      | 7%        |
| Not sure                                               | 6%    | 7%    | 0%    | 2%      | 10%       |
| <b>34c. medication history</b>                         |       |       |       |         |           |
| Usually data are manually entered into the EHR         | 40%   | 40%   | 41%   | 39%     | 42%       |
| Usually data are automatically integrated into the EHR | 51%   | 50%   | 56%   | 57%     | 46%       |
| Not applicable                                         | 2%    | 2%    | 2%    | 3%      | 2%        |
| Not sure                                               | 6%    | 7%    | 0%    | 2%      | 10%       |
| <b>34d. Immunizations</b>                              |       |       |       |         |           |
| Usually data are manually entered into the EHR         | 50%   | 50%   | 51%   | 53%     | 47%       |
| Usually data are automatically integrated into the EHR | 36%   | 34%   | 42%   | 44%     | 27%       |
| Not applicable                                         | 7%    | 8%    | 5%    | 1%      | 14%       |
| Not sure                                               | 7%    | 7%    | 2%    | 2%      | 11%       |

2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

|                                                        | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------------------------|-------|-------|-------|---------|-----------|
| 34e. radiology or specialty consult reports            |       |       |       |         |           |
| Usually data are manually entered into the EHR         | 58%   | 56%   | 65%   | 61%     | 54%       |
| Usually data are automatically integrated into the EHR | 32%   | 32%   | 29%   | 34%     | 29%       |
| Not applicable                                         | 4%    | 4%    | 4%    | 2%      | 6%        |
| Not sure                                               | 6%    | 7%    | 2%    | 2%      | 11%       |

**35. Do providers at your clinic receive automatic electronic notifications (i.e., an alert) when any of their patients are admitted or discharged from the hospital, or visit the emergency department? Select all that apply.**

|                                                       | Total | Urban | Rural | Primary | Specialty |
|-------------------------------------------------------|-------|-------|-------|---------|-----------|
| 35a. Yes, from hospitals within our health system     | 55%   | 56%   | 50%   | 64%     | 47%       |
| 35b. Yes, from hospitals outside of our health system | 14%   | 13%   | 17%   | 16%     | 11%       |
| 35c. No                                               | 40%   | 40%   | 39%   | 30%     | 50%       |
| 35d. Not sure                                         | 1%    | 2%    | 0%    | 1%      | 2%        |

## Non-Adopters

**36. Does your clinic have a plan to acquire and implement an EHR?**

|             | Total |
|-------------|-------|
| Yes         | 0%    |
| No          | 89%   |
| Do not know | 11%   |

## All respondents complete rest of survey

### Counts for questions 37-51 (all respondents)

|                                                              | Total | Urban | Rural | Primary | Specialty |
|--------------------------------------------------------------|-------|-------|-------|---------|-----------|
| EHR is installed and in use for at least some of the clinics | 1,314 | 1,105 | 209   | 652     | 662       |

### 37. Which of the following e-health resources or workforce skills would help your clinic to advance use of HIT and/or electronic exchange of health information (HIE)? (select all that apply)

|                                                                                                         | Total | Urban | Rural | Primary | Specialty |
|---------------------------------------------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| 37a Implementing an EHR system, managing EHR system updates, and/or transitioning to a new EHR system   | 17%   | 16%   | 22%   | 17%     | 17%       |
| 37b Translating clinical needs to IT staff to optimize and/or customize EHR                             | 22%   | 19%   | 35%   | 23%     | 21%       |
| 37c Training staff and clinics to use the EHR system                                                    | 19%   | 17%   | 29%   | 19%     | 19%       |
| 37d Managing workflow changes                                                                           | 41%   | 38%   | 59%   | 47%     | 36%       |
| 37e Developing policies and procedures for managing data quality                                        | 19%   | 17%   | 25%   | 26%     | 12%       |
| 37f Using data analytics and/or informatics                                                             | 25%   | 20%   | 49%   | 35%     | 15%       |
| 37g Managing patient consent to share health information                                                | 35%   | 40%   | 9%    | 30%     | 40%       |
| 37h Mitigating security risks to help prevent data breaches                                             | 15%   | 15%   | 14%   | 12%     | 18%       |
| 37i Developing infrastructure to support HIE                                                            | 29%   | 29%   | 30%   | 29%     | 29%       |
| 37j Selecting an HIE vendor and/or negotiating an agreement                                             | 13%   | 14%   | 9%    | 11%     | 16%       |
| 37k Establishing HIE agreements with exchange partners                                                  | 19%   | 17%   | 27%   | 21%     | 17%       |
| 37l Integrating patient data from external sources into our EHR                                         | 38%   | 35%   | 54%   | 38%     | 38%       |
| 37m Understanding and/or using nationally recognized e-health standards                                 | 13%   | 12%   | 17%   | 15%     | 11%       |
| 37n Understanding Federal and State laws relating to e-health, health information exchange, and consent | 14%   | 13%   | 16%   | 14%     | 14%       |
| 37o Technical assistance to support HIE with MDH                                                        | 37%   | 39%   | 28%   | 33%     | 41%       |

## Patient Electronic Access

### 38. Does your clinic offer an online patient portal?

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 97%   | 97%   | 96%   | 99%     | 94%       |
| No (skip to Q42)       | 3%    | 3%    | 4%    | 1%      | 6%        |
| Not sure (skip to Q42) | 0%    | 0%    | 0%    | 0%      | 0%        |

### 39. Which of the following features or functionalities are available to the patients through the patient portal? (select all the apply)

Base = "Yes" to Q38

|                                                                      | Total | Urban | Rural | Primary | Specialty |
|----------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| 39a Access to care plans                                             | 69%   | 71%   | 55%   | 69%     | 69%       |
| 39b Access to all or some of providers' progress notes/documentation | 67%   | 64%   | 85%   | 72%     | 62%       |
| 39c Immunization records                                             | 85%   | 83%   | 93%   | 97%     | 72%       |
| 39d E-Visits                                                         | 62%   | 62%   | 62%   | 70%     | 53%       |
| 39e Patient education materials                                      | 83%   | 82%   | 89%   | 88%     | 78%       |
| 39f Submission of home-based health data                             | 33%   | 31%   | 47%   | 43%     | 24%       |

### 40. Approximately what percent of your clinic's active patients have signed up for the patient portal?

Base = "Yes" to Q38

|                 | Total | Urban | Rural | Primary | Specialty |
|-----------------|-------|-------|-------|---------|-----------|
| Average percent | 43.6  | 44.7  | 38.0  | 42.9    | 44.4      |

### 41. Indicate which functions your clinic offers to patients to access and use their patient health information (select all that apply):

Base = "Yes" to Q38

|                       | Total | Urban | Rural | Primary | Specialty |
|-----------------------|-------|-------|-------|---------|-----------|
| 41a View online       | 97%   | 96%   | 98%   | 99%     | 94%       |
| 41b Download          | 77%   | 76%   | 88%   | 80%     | 75%       |
| 41c Transmission      | 54%   | 55%   | 48%   | 55%     | 53%       |
| 41d None of the above | 1%    | 1%    | 0%    | 0%      | 1%        |
| 41e Not sure          | 2%    | 2%    | 2%    | 0%      | 4%        |

## Telemedicine

### 42. Does your clinic use telemedicine services? This does not include telemonitoring.

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 64%   | 62%   | 79%   | 76%     | 53%       |
| No (SKIP TO Q44)       | 29%   | 31%   | 20%   | 23%     | 35%       |
| Not sure (SKIP TO Q44) | 7%    | 8%    | 1%    | 2%      | 12%       |

### 43. For which of the following activities does your clinic use telemedicine? (select all that apply)

Base = "Yes" to Q42

|                                                                             | Total | Urban | Rural | Primary | Specialty |
|-----------------------------------------------------------------------------|-------|-------|-------|---------|-----------|
| 43a Primary care consultation with clinical specialists                     | 37%   | 35%   | 45%   | 41%     | 33%       |
| 43b Specialty care consultation with primary care clinician                 | 48%   | 44%   | 66%   | 58%     | 35%       |
| 43c Hospital/emergency department consultation with your clinic             | 17%   | 11%   | 44%   | 24%     | 8%        |
| 43d Urgent care                                                             | 23%   | 20%   | 36%   | 29%     | 14%       |
| 43e Consultation with long-term and post-acute care, including hospice care | 8%    | 5%    | 20%   | 11%     | 3%        |
| 43f Chronic disease management                                              | 44%   | 47%   | 33%   | 43%     | 47%       |
| 43g Psychiatry or psychology                                                | 63%   | 62%   | 64%   | 65%     | 59%       |
| 43h Wound care                                                              | 2%    | 1%    | 5%    | 2%      | 1%        |
| 43i Rehabilitation therapies                                                | 1%    | 1%    | 0%    | 0%      | 2%        |
| 43j Lifestyle change education                                              | 30%   | 32%   | 19%   | 26%     | 35%       |

43k Other: See Appendix A



## E-Prescribing

- 44. Approximately what percent of your clinic's prescriptions are electronically prescribed?**  
(Average percent)

|                                                       | Total | Urban | Rural | Primary | Specialty |
|-------------------------------------------------------|-------|-------|-------|---------|-----------|
| For scripts that do not include controlled substances | 95.1  | 95.0  | 95.6  | 95.5    | 94.7      |
| For scripts that include controlled substances        | 51.9  | 51.5  | 54.0  | 53.1    | 50.7      |

- 45. Does your clinic utilize the electronic Formulary and Benefit Standard for reviewing medication formulary and benefit information?**

|                        | Total | Urban | Rural | Primary | Specialty |
|------------------------|-------|-------|-------|---------|-----------|
| Yes                    | 85%   | 86%   | 79%   | 88%     | 81%       |
| No (skip to Q48)       | 8%    | 7%    | 12%   | 7%      | 9%        |
| Not sure (skip to Q48) | 7%    | 7%    | 9%    | 5%      | 9%        |

- 46. How helpful is the information in e-prescribing decisions?**

Base = "Yes" to Q45

|                  | Total | Urban | Rural | Primary | Specialty |
|------------------|-------|-------|-------|---------|-----------|
| Very helpful     | 49%   | 51%   | 38%   | 47%     | 52%       |
| Somewhat helpful | 38%   | 37%   | 43%   | 40%     | 35%       |
| Not helpful      | 7%    | 6%    | 15%   | 9%      | 6%        |
| Not sure         | 6%    | 6%    | 4%    | 4%      | 8%        |

- 47. Describe how this information could be more helpful for your practice.**

See Appendix A.

- 48. To what extent do prescribers in your clinic use electronic prior authorization (ePA) to request medication prior authorizations requests with payers and pharmacy benefit managers?**

|                                               | Total | Urban | Rural | Primary | Specialty |
|-----------------------------------------------|-------|-------|-------|---------|-----------|
| For 80-100% of prescriptions                  | 17%   | 17%   | 17%   | 17%     | 16%       |
| For 50-79% of prescriptions                   | 13%   | 13%   | 16%   | 15%     | 12%       |
| For 25-49% of prescriptions                   | 13%   | 15%   | 5%    | 15%     | 12%       |
| For less than 25% of prescriptions            | 18%   | 18%   | 17%   | 15%     | 21%       |
| We do not use electronic prior authorizations | 13%   | 13%   | 14%   | 12%     | 15%       |
| Not sure                                      | 25%   | 24%   | 31%   | 26%     | 24%       |

## Administrative Transactions

**49. Does your clinic routinely check insurance eligibility electronically using the standard known as the “270/271”?**

|                                    | Total | Urban | Rural | Primary | Specialty |
|------------------------------------|-------|-------|-------|---------|-----------|
| Yes, for 50-100% of patients       | 90%   | 90%   | 85%   | 92%     | 87%       |
| Yes, for less than 50% of patients | 2%    | 2%    | 0%    | 1%      | 3%        |
| No                                 | 4%    | 4%    | 5%    | 2%      | 5%        |
| Not sure                           | 5%    | 4%    | 10%   | 5%      | 4%        |

**50. Does your clinic receive electronic remittance advices (ERA) using the standard known as the “835” ?**

|                                  | Total | Urban | Rural | Primary | Specialty |
|----------------------------------|-------|-------|-------|---------|-----------|
| Yes, for 50-100% of claims       | 93%   | 94%   | 86%   | 93%     | 93%       |
| Yes, for less than 50% of claims | 1%    | 0%    | 3%    | 1%      | 0%        |
| No                               | 1%    | 1%    | 0%    | 0%      | 1%        |
| Not sure                         | 6%    | 5%    | 11%   | 6%      | 6%        |

**51. Does your clinic receive electronic acknowledgements of their claims submissions using any of the standards known as the “TA1,” “999,” or “277CA”?**

|                                  | Total | Urban | Rural | Primary | Specialty |
|----------------------------------|-------|-------|-------|---------|-----------|
| Yes, for 50-100% of claims       | 79%   | 78%   | 83%   | 86%     | 73%       |
| Yes, for less than 50% of claims | 4%    | 5%    | 0%    | 3%      | 6%        |
| No                               | 2%    | 2%    | 2%    | 2%      | 2%        |
| Not sure                         | 15%   | 15%   | 15%   | 10%     | 20%       |

## Appendix A

This appendix includes responses for the open-ended questions in this survey. They are presented as a single response per organization (as opposed to a response for each clinic, since many of the responses are duplicated). Responses are sorted in alphabetical order and have been edited only for obvious typographical errors.

### 10. What other types decision support tools does your clinic use (or would like to use) to support patient care?

- ACR
- Add medication registry
- Advance Care Planning, Falls risk assessments, Falls care planning
- Advanced Directives, AFib therapy, antithrombotic therapy, INR, LDL, Pneumonia blood cultures, stroke education
- Advanced imaging
- All of the above
- Annual Exams Pap Smears Immunizations Mammograms
- Anti-Coagulation, Smoking Cessation, Bronchitis, UTI, Sinus Infections
- Asthma
- Asthma Care Plan ADHD Care Plan Depression/Anxiety Care Plan
- asthma, and mental health appointment
- Asthma, colorectal cancer, depression
- Asthma, Sepsis
- Automated asthma care reminders.
- Best Practice Advisories fire for any measure specified issues
- best practice alerts
- BMI Influenza Chlamydia Pneumonia Heart Failure IVD - ASA Drug Drug Drug Allergy
- BMI and Smoking status
- BMI, Smoking cessation, colonoscopy and mammogram reminders, flu vaccines, abnormal pap smears
- BPAs for things such as LD Aspirin, COPD, etc.
- chemotherapy treatment pathways
- Chronic disease management (registries) within Ambulatory record
- CLEAR TRIAGE (have) HIP SURVEILANCE (want) more to come...
- Clinical pathways
- Conditions related to skin and dermatology
- Decision Support tools for Asthma and Depression
- Depression
- Depression and BMI
- Depression, Alcohol and Drug screening tools
- Drug allergy interaction, ASA, BPA's
- Fall Risk, Depression, Asthma
- Falls, Bone density scans, morphine equivalents, and risk
- For Medicaid attestations, we have included: -Smartset for well child visits -Health Maintenance Alert for childhood immunizations -HMA for influenza immunization -HMA for chlamydia screening -HMA for colorectal cancer screening if eligible
- glaucoma flow sheets nerve and macula imaging (OCT) visual fields corneal thickness ascans

## 2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

- glaucoma, macular degeneration
- Handouts, e.g. tobacco cessation; types of hearing loss, sinusitis
- Health Maintenance, Best Practice Alerts, Drug Interactions
- Hep C Screening Weight management smoking
- I would like all listed above
- Immunizations, BMI
- Integrated care plans
- Intelligent Chronic disease care support
- Life expectancy or mortality decision support tool Predictive and retrospective analytics Test reminders other than My Chart Up to Date resources, ACOG resources, Allina-wide practice protocols Up to Date, Micromedix, MN Prescription Monitoring Program
- mammograms, gonorrhea and chlamydia for women < 27 years of age, colonoscopies
- Med to Med, Med to Allergy interaction check, myPlan which presents providers with specific order sets based on diagnosis, Patient education is provided to providers based on specific diagnosis
- Medicaid attestations were supported by: smartset for well child visits, Health Maintenance Alerts (HMAs) for Childhood Immunizations, influenza immunizations, chlamydia screening, Colorectal Cancer Screening (if eligible),
- Mental/Behavioral Health
- More accurate medication formularies.
- More predictive analysis. Risk scoring and stratification tools.
- Notifications for C&TC requirements. (ie Lead screening, Fluoride, SDOH)
- Nus Bar Removal reminders. Follow up appointment reminders. Future test needed alerts Already set in place, pre made alerts attached to certain patients.
- obstetrical management
- Order Sets
- Order sets specific to diagnosis. Protocols for rectal and colon cancer follow up.
- Orders for physical therapy, injections and imaging
- Orthopedic Spine support tools
- Our EHR lets us know when patients with chronic conditions have something due or out of control.
- Patient Education, Antipsychotic drug use with dementia, BMI, positive PHQ9, Tobacco Use
- Pediatric Triaglogic, up to date
- phq9, gad, mood disorder questionnaire, AIMS, DISCUS
- Pregnant Hypothyroid
- Preventive care screenings
- Registry
- reminders for urine drug testing and reminders for Opioid risk tool.
- screening tests, Chest CT & Colonoscopies
- Smoking, Primary care giver, sexual history, vaccines
- Switching to Epic for better flow across the care continuum
- Tobacco Screening, BMI Screening Currently working on Radiology CDS
- up to date
- Up-to-date AHRQ EPSS
- Up-to-Date, separately loaded onto mobile devices for use
- Vascular, Depression, Asthma, Immunization, Preventative Screenings
- We also use in office protocols based on evidence based, and literature review
- We are switching to Epic where the tools are more accessible with better flow.

## 2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

- We are unsure what options are available through Allina/Excellian version of EPIC
- We currently aggregate data and take automated, systematic action on that for certain conditions (e.g., place orders, send patient notifications). There is desire to expand that to more conditions.
- We have alerts that help us when a patient is overdue for a Mammogram, is a smoker, etc.
- We use CDS to prompt for Suicide Risk Assessment, Depression assessment, PHQ-9 use.
- We use CDSR for Depression follow up, tobacco use, BMI, and A1c's for clients on anti psychotics.
- We use Health Maintenance Alerts to support colorectal cancer screening, breast cancer screening, depression screening, and Falls Risk Screening - although action on these alerts is inconsistent across our clinics.
- We will be getting Merck Professional tools with our system's upgrade.

### 19. For which of the following chronic conditions does your clinic regularly (at least 4 times per year) generate patient lists? "Other" responses.

- Asthma
- Asthma, ADHD, Depression
- Asthma, Depression
- Asthma, Depression, CHF
- Asthma, Depression, Chronic Opioid, Colorectal Rectal Cancer, Heart Failure, Vaccines
- Asthma, depression, CKD
- Asthma, Depression, COPD
- Asthma, Juvenile Rheumatoid Arthritis, Cystic Fibrosis
- Asthmatic, depressed
- Bladder augmentation
- BMI
- BMI, Chlamydia
- Breast cancer screening; colorectal cancer screening
- Cancer
- Cardiovascular, Depression, Asthma
- Chronic Kidney Disease
- conditions related to dermatology
- Currently working with EHR vendor to generate chronic disease registries
- Cystic Fibrosis, Primary Ciliary Dyskinesia, Asthma, Technology dependent patients
- Depression
- Depression - Asthma
- Depression, Asthma
- glaucoma
- glaucoma, cataract, AMD
- Grand Itasca became affiliated with Fairview and switched to a new EPIC. Reports look back 12 months so are not accurate to distribute to providers yet.
- High risk pregnancy
- HIV
- Idiopathic Pulmonary Fibrosis
- Ischemic Vascular Disease, Asthma, Depression, Opioid Management
- List of all pregnant patients
- Major Depression

## 2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

- melanoma, psoriasis
- Meniere's Disease
- mental health conditions
- MNMCM measures - Diabetes Care, Vascular Care, Colorectal Cancer Screening, Depression, and Asthma (as applicable for eligible populations)
- MNMCM measures: Colorectal Cancer Screening, Asthma, Depression, Vascular, Diabetes care
- Opioid Use
- PHQ9, BMI A1C
- Prostate Cancer
- STI tests and treatment, abnormal breast conditions, procedures received, diagnosis codes, miscarriages and abnormal pregnancies
- those needing urine drug screening
- use a billing system, not the clinic's EHR, Kareo - Kareo is not accurate
- Vascular, Asthma
- Vascular, asthma, Depression
- Vascular, asthma, depression, colorectal screening
- Vascular, Depression, Asthma
- Vascular, Opioid Management, Asthma Management

Q20

chart abstraction

Grant reporting

manual process, Kareo does not have this functionality

MNCM depression measures reporting

Monitor MIPs data

Reporting requirements to regulatory, insurance etc.

We also attempt to watch for trends, and monitor diagnosis numbers and groupings (percentages)

we are just starting to really use data for all of the above reasons.

We implemented an EHR in April. We are still learning some of the tools available to us.

### **22. What types of data would you like to have available from your EHR to support care delivery and patient outcomes (e.g., environmental exposures, housing stability, access to healthy foods, and other social determinants of health)?**

- A Care Plan with goals that address barriers
- Access to food, housing instability
- access to health foods
- Access to health foods, economic income levels, cultural determinants, can't afford care, etc.
- all examples listed
- All of above
- all of the above
- All of the above, Medication adherence and affordability
- all of those listed
- Annual income or other Socioeconomic factors.
- Any and all of the above and to include transportation and food insecurity
- barriers that include financial barriers

## 2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

- Better ability to create our own patient registries within the EMR rather than outside tools that are not integrated
- Better Mental Health History tracking
- Clear Socio-Economic Status
- Community resources available
- Cross over of data sets so you can one report with many different fields vs creating many reports and merging.
- Custom documentation for lack of food or worrying about food. Added doc. Comfort Promises for immunization
- Education level, environmental factors, housing situation
- Environmental exposures and housing instability
- environmental exposures
- Epic currently provides a social determinants of health analysis on the snapshot based on data collected.
- Financial resource strain, housing stability, food security, sexual orientation, gender identity, disability status, veteran status, transportation, utilities
- Food stability, housing security, access to safe outdoor community
- Household income, travel challenges, interpreter needed
- Housing instability
- Housing instability, access to healthy foods, safety
- housing instability, access to healthy foods, transportation, support system, education
- Housing instability, stressors
- Housing issues/homelessness and all other social determinants of health possible
- Housing issues/homelessness and all other social determinants of health possible. This is critical to support patients in thriving at home - and would directly impact clinic appointment attendance, as well as readmissions rates.
- Housing stability, transient populations. This would directly impact treatment plans and demonstrate the extent to which we need additional social work/care coordination/community health worker support to maximize people's health and reduce readmissions and ED visits.
- Housing, food, social determinants of health
- In November 2018, we will have comprehensive social determinants of health documentation available.
- Infection control monitoring, patient registries for chronic disease management
- Insurance coverage and eligibility
- Kareo has limited functionality, so any data would be helpful
- MHIS data reported to DHS, in our tx dx there is the psychosocial & contextual factors
- no-information overload
- notification of transitions
- Our EHR has the ability to consume pt originated data and support use of home based tech such as wt scales and BP monitors. But pt expense and complexity of setup, along with dev and educ workflows are creating staff time to perform are barriers
- Patient Reported Outcomes
- population health, geographic demographics information, geographic care access information
- Presence of action plans (asthma), dashboards related to measures (asthma, diabetes, etc.)
- Real time status of insurance deductibles
- Reportable Social information
- SDOH
- Social and health history

## 2018 MN CLINIC HIT SURVEY CROSS-TABULATIONS

- social determinants of health
- social determinants of health - i.e. food deserts, housing instability, care giver support needs
- Social Determinants of Health in Future
- social determinants of health will be added to our care management module and we do have some questions that identify areas but not in a specific place in the record
- Social determinants of health; zip code analysis
- Social determinants-housing, food, community resources
- State Quality Benchmarks
- Transportation issues, employment status, disability status
- Treatment plan data
- unsure
- We use a case management data base to collect and track other information
- Would be nice to have all the above listed items

**32. Please describe the barriers your clinic faces to ensure providers have needed patient information to support patient outcomes. This can include types of information (e.g., labs, images, notes), ability to exchange electronically, and other barriers.**

- Ability to electronically exchange; Need to manually enter everything
- Ability to exchange across different platforms in a meaningful way. labs and imaging reports especially
- Ability to exchange ambulatory care records
- Ability to exchange electronically
- Ability to exchange electronically and ability to exchange relevant data
- Ability to exchange electronically between different EMR's
- ability to exchange electronically is a barrier
- ability to exchange electronically is the biggest barrier
- Ability to exchange electronically through the EHR
- ability to exchange electronically with providers who don't have EHR
- Ability to exchange electronically with referring doctors. Many of them are optometrists.
- Ability to exchange electronically. Minnesota has a very fractured HIE system.
- Ability to exchange information electronically
- Any records outside of EPIC, we are unable to obtain easily.
- As an independent provider, we are limited in what we can share and obtain from the larger systems. Enhancements to our system through our EMR such as Carequality are cost prohibitive and an additional expense on top of our EMR.
- Availability of systems that connect with our specialty, and budget/financial constraints.
- Being able to receive the electronic information.
- certain hospitals not part of data exchange
- Clinical documentation (notes) are not included in CCD/CDA.
- Closing the loop and other health care systems not using an EHR or wanting to share information
- closing the loop is easy with a clinic/facility in Centracare Epic but any external EMR is still a manual process
- complex set up one by one with each electronic system if multiple systems involved
- Complexity of setting up and maintaining pt supplied docs coming into the HER is also a barrier. Dealing with scanned docs as data contained in scans are not discreet. Staff and prov not fully embracing and until the tech available. Maintaining and updating clinical data provided



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by the pt, specifically social hx and past med hx. compiling and maintaining data accuracy and relevancy and having it in a form the team can easily access . EHR infrastructure inadequate for managing populations; built around and focused on FFS practice management.

- Consistent lab results for ordered labs. Lack of participation from most clinics for HIE.
- cost of acquisition, setup and maintenance
- cost of electronic exchange, capability of EMR, availability of other clinics having exchange
- Cost of HIE Vendor. Receiving records from outside health systems in a timely matter. Not able to exchange data electronically with providers outside our organization.
- Currently do not have this electronic ability outside of Gillette. Internally yes.
- Data link to outside providers
- Data link to outside providers.
- Different EMR in clinic, in hospital, in home, and in competing clinics in community, and none of the systems talk
- difficult to communicate with providers outside of organization- unknown direct email address
- Direct addresses are difficult to obtain and manage in the current EHR
- Direct addresses are difficult to obtain and manage in the current EHR.
- Direct electronic exchanges
- -Do not have access to EVERY patient's medication hx from outside facilities -Do not routinely get all visit notes from urgent cares and mental health providers.
- EHR functionality
- EHR functionality; plus ease of use for HIE; switching to Epic in an effort to resolve some of these barriers
- EHR systems do not always communicate in such a way when sending documents electronically that it is efficient to find the information. Sometimes it is lost in historical, non-pertinent information
- Electronic exchange interoperability & resource intensity, privacy rules
- electronic faxing doesn't always work, doctors move and hard to track numbers/addresses, patients don't know names of their doctors
- electronically sharing CCDA documents provides some useful clinical data, however many key pieces are missing.
- EPIC is not efficient with closed loop referrals. Often information needs to be faxed.
- extra steps that it takes to bring the data in to the current EHR
- health information exchange implementation of after visit summaries
- HIE with other practices
- High levels of scanning for all areas and data input for billing and claims.
- If the other facility doesn't have current signed GCA on file or if psychiatric information is requested, a separate authorization must be obtained from the patient, sometimes hard to get the information in time for the visit
- images don't always come up as the right size, so we are constantly scrolling left to right and up and down to see the image. Or we have to open it in a new window. Sometimes the scanned documents don't appear as the actual size. When they are scanned it's like they are shrank. 10pt font is really small to begin with, making it smaller and distorted can be an issue for providers.
- Inability to easily monitor chronic disease management items (registries)
- Inability to exchange electronic information outside of electronic faxing.
- inability to exchange electronically
- Inability to exchange information electronically. Most testing results come in via fax and have to be manually moved to the EMR.
- Inability to exchange information electronically. Staff time to obtain information

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- Inability to review progress notes from outside clinics. Use of different EMRs
- Information from outside organizations can be difficult to sift through. From a hospital stay we may receive duplicate pieces of paper rather than a single summary of care or discharge summary. The variability makes information retrieval challenging for the care team.
- Information overload for complex patients.
- Interfaced Radiology and Pathology reports
- interoperability between different EHR systems.
- Interoperability has a long way to go, we don't know direct addresses, info coming in has so much garbage.
- interoperability of EHRs; huge barrier when considering radiology images
- Interoperability or interface to other facilities
- It is such a manual process to interconnect entities allowing for data sharing
- It would be helpful to be able to access patient data from outside entities from within our EHR
- Lab interface, Radiology interface, ability to "talk" to other systems, Disease management hard stops, integrated disease management strategies, etc.
- Lack of ability to exchange information electronically and therefore get information easily in a timely manner.
- lack of HISP addresses to exchange CCD's with other organizations, lack of functionality in Meditech
- lack of information in CCD's lack of collaboration/cooperation from other health systems. We hope to see improvement with the implementation of our new EMR Epic
- lack of interfacing
- Lack of interoperability of EMR systems between clinics and hospitals. Often requires individually contacting clinics/patients for specific patient information.
- Lacking technical expertise within our organization and our EHR vendor is slow to make programming updates when validation shows disparities.
- Limitations of HIE exchange especially with images.
- limited HIE and referral information from outside facilities
- many different EHR don't interoperate. we are part of HIE, but can only communicate with those also participating in same HIE. not everyone is participating.
- MN ROI laws for continuity of care
- More facilities could use CareEverywhere for continuity of care
- needing to obtain records and have them faxed
- New acquisitions not using Epic.
- No access to exchange electronically yet.
- no issues
- No one uses NextGen. Would like a government run exchange that operates independent of EHR system.
- None of the referral providers we use have the same AEHR as us. Everything we do outside of our clinic needs to be faxed. Our local hospital uses another type of EMR, we still have to generate paper orders for the hospital.
- None, our reports can be faxed.
- None, we have no problems sending information via fax.
- non-robust EMR and clinical practice is small, does not support purchase of expensive EMR
- Not a good interface with Epic, working with ER to have access
- Not all facilities have a "direct address" for us to send this information to. And the information we electronically send is minimal information. We always end up faxing the physicians entire note explaining why the patient is being referred, the detailed report. Or the information we are

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getting from outside facilities is not helpful or detailed, its usually information on medication, allergies, past medical but we do not receive information regarding the referring providers assessment/plan.

- Not all outside sites available to accept or send patient info via HIE. Timeliness of making a care everywhere request prior to visit.
- Not knowing where other records exist
- other clinics and health systems do not use direct mail (similar to secure email) to receive/send documentation
- Other clinics are not prepared to send or receive via their EMR
- other facilities need to direct message and we need better HL7 links to allow for 2-way communications
- Other facilities not on the same EHR as us. Interoperability issues with HIE.
- Other healthcare systems not willing to share secure direct email addresses with us.
- Our clinic currently does not have the ability to exchange information electronically.
- Our EHR system, we have to reach out to the provider that we will be sending information to and ask them to go the 2P2 website and register with them in order for us to be able to send things electronically. We are working with our vendor to activate external MR (Health Wise) so we will have communication with Epic..
- Outside sources require their own paperwork, use of their portals, etc. Does NOT communicate with our system.
- Patient refuses to sign Care Everywhere consent for information. Specialist's referrals - don't send a follow up provider note back to Grand Itasca.
- Provider (other) from outside, use/knowledge of available technology to exchange patient information electronically.
- Recall ability for patients who have not been in for a visit and are in need of retesting or meds adjustments.
- Referrals: ability to exchange electronically is a barrier for us. Our referral partners are part of larger systems and have little interest in partnering with us in electronic exchange.
- Scanned documents do not place the patient information in the most important areas for clinical decision making; Patients have limited access to the internet in Kanabec and Pine Counties.
- Scanned images do not pull through to all patient account numbers.
- Some organizations we attempt to send this information to does not have this capability
- specialists returning f/u in a timely manner. Some not at all. Help Me Grow referrals do not routinely come back at all so we do not know what services are patients are receiving
- Staff understanding/willingness to use and the lack of a Minnesota Statewide Direct Messaging Directory.
- Staffing
- systems don't talk to one another
- The ability to exchange data electronically, limited EHR functionality.
- The consent form is understandable, but we have run into situations that other providers will not send info provider to provider because they weren't referred, leaving us to have to get a consent form and wait for the records.
- The partnership of our EHR and the capability within systems.
- There are some specialty groups we work with who we're not able to electronically obtain notes and labs, but overall our health system doesn't have a great deal of trouble exchanging with other systems. The challenge is not the exchange, but the workflow associated with reviewing and acting upon all the information we receive.

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- Timeliness. Reports may arrive after the patient's scheduled appointment.
- Timeliness. Reports often come after the patient's appointment has been completed.
- Unreliable ability send/receive direct messages from other EMRs.
- Unwillingness of outside facilities to send information to us
- Updated labs from primary care providers not sent to us. Clinics not set up to send us information electronically
- very limited ability to exchange/receive information between members of the patient's care team.
- we (this market) needs an HIE - with out an HIE none of this is going to do much good
- We are not record sharing at this time. recently implemented Athena.
- We are an independent specialty practice. Our EHR is not integrated with any others. We have access to both hospital EHRs in our city, though.
- We are an organization that is made up of 3 electronic health records. Also, we are not an Epic facility so it's much harder to transfer data electronically.
- We are still learning the system. We implemented the EHR in April.
- We are unable to exchange any information with other EHR's.
- We are unable to exchange information electronically with other providers as we are a small solo practitioner specialty clinic and are not connected with other provider's EHRs.
- We currently are on a different EMR than a lot of our referring providers. Therefore our records are not integrated with their system, nor theirs ours. We have to electronically fax or receive faxed records. Barriers would be short staffed days, power outage etc.
- We do not have the funding for the necessary technology. Must be done manually and by telephone.
- We don't have any, unless we don't get sent information
- we fax over everything via faxfinder which works great but most of the clinics we refer pts to don't exchange information electronically.
- we have access to this just no HIE doing this in our area right now.

### **43. For which of the following activities does your clinic use telemedicine? "Other" responses**

- Burn and Primary Care Convenience Care
- Cardiology
- Chronic Care Management (CCM)
- Community paramedics, follow-up after hospital discharge.
- Dermatology consultation
- Dermatology, Stroke
- Direct clinical specialty in Dermatology to patient
- Genetic counseling, palliative care
- Infectious Disease
- Mental Health
- Pre Op nursing
- Radiology Reads and Consulting Radiology
- Real-time video televisits with patients
- sleep health
- specialty visit
- Specialty Care Consultation
- Specialty Care Consults w/Patients at Specific Locations
- Surgery Post-Ops and follow ups

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- Telemedicine Medication Abortions, Oral Birth Control, UTIs
- Tele-stroke, E-emergency
- We provide telestroke and IP neurology consultations. Telehospitalist service overnight for some hospitals as we as eICU coverage at some hospitals. We also provide virtual “real time” established patient visits to patients at home or office for primary care (limited by provider), weight management, courage Kenny, and Penny George. Lastly, we provide some ePharmacy services.

### **47. Describe how this [F&B] information could be more helpful for your practice.**

- A more active link with real time requests that result in increased efficiency
- Accuracy - often the accuracy of the formulary status is questionable or inaccurate.
- all pharmacies accepting e-prescribed
- An improved EHR workflow would help.
- as a surgical practice, we prescribe pain meds for post surgical healing and the occasional antibiotic
- better accuracy, more easily accessible
- Better timing of information. Comes after provider signs order so requires cancel/re-order. At time of order entry would be better.
- Critical drug interaction alerts
- data needs to be more accurate - complicated messages like "step therapy" need to be communicated more clearly
- Difficult to understand
- Easier to access
- easier to navigate
- Easier transition to formulary med, being able to select the formulary med and disregard non formulary med.
- Familiarity over time
- Formulary files are often outdated, or if insurance changes not identified at the time of visit (or at the beginning of the visit) we are not able to look this up in real time.
- Formularies updated more frequently by insurance companies
- Formulary and benefit information not always up to date
- If it was specific to that patient (not generalizations)
- If our formulary checks would always work. Sometimes they fail
- Information accuracy
- Insurance companies frequently change formularies and requirements making it extremely difficult when prescribing
- It is already very helpful to making decisions regarding generic or the need for a prior authorization.
- Knowing a patient’s formulary information saves time of prescriber, clinical assistant, pharmacist, and patient
- lack of information on approved alternatives that would be covered
- Letting us know of covered/uncovered scripts
- list Formulary Alternatives
- many times it says the drug will require a pa when it does not
- Medications not prescribed in our practice. We are a sub-specialty, preventive cardiology group
- More complete database information for the pharmacy benefits manager for the patient.

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- More configurable by the practice. Age appropriate alerts considering multiple chronic diseases, age, and frailty.
- More details regarding alternatives and requirements would be nice. Frequently, no formulary is available or everything is "off formulary" so we find it hard to know if the information is reliable.
- More helpful if it were available on ALL patients. Sometimes it comes up unknown what is formulary.
- need it to be more up to date
- Need more streamline to use this tool
- not able to e-prescribe
- Not all insurance companies share their formulary.
- Not always up to date
- payer specificity is causing an issue--there is not parity across all payers for approved MME levels
- Redundancy with duplicate meds etc.
- Some "tier" information is not correct.
- The ease of use is a significant issue.
- The formulary information is helpful for the initial selection process and it can help decrease how often we need to change a prescription and write a new one.
- There are flags for every medication; difficult to utilize.
- to give options if a medication is NOT covered
- we get better results using "cover my meds"
- what pharmacies carry a certain medication

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