# Regional Health Care Initiative
# Findings, Conclusions, and Recommendations

## February 2010

MARC
Mid-America Regional Council

SNC
Safety Net Collaborative

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## Introduction

Almost 450,000 people in metropolitan Kansas City are either uninsured or covered by Medicaid. An additional number of residents are underinsured with high co-pays and deductibles. Many of these individuals rely upon safety net providers to meet their health care needs. The term safety net has come to broadly refer to a loose network of care that includes public hospitals, federally qualified health centers, public health departments, faith based clinics, free clinics and other independent clinics which, either by mission or mandate provide significant amounts of health care to people who are uninsured, underinsured or medically underserved and who cannot easily access care or cover the costs of their own care.

Metropolitan Kansas City has 17 safety net organizations running 33 clinics that provide primary health care to patients. While this appears to be an abundance of service sites there are still critical shortages in the amount of health care that is available to the uninsured and Medicaid populations. Additional barriers unique to Kansas City, such as the differences in Medicaid eligibility requirements between Kansas and Missouri, a limited regional public transportation system, limited access to the safety net system in suburban portions of the metropolitan area and limited access to services in the evening and on weekends further reduces access to timely, quality health care.

The Regional Health Care Initiative (RHCI) sponsored by the Mid America Regional Council (MARC) is a regional initiative promoting innovative, collaborative approaches to providing health care to the uninsured and medically underserved. This initiative is funded through the REACH Healthcare Foundation, Health Care Foundation of Greater Kansas City, the Sosland Foundation, Bank of America, H&R Block Foundation, Wyandotte Health Foundation, the Hall Family Foundation, and the Sunflower Foundation. The RHCI has worked closely with safety net providers in the Kansas City metro area and this report is a summary of the information gained and conclusions reached from that work.

This report is based on data collected through a safety net survey in 2007, additional data provided by safety net clinics as they worked on a variety of initiatives, data on emergency department visits provided by the Missouri and Kansas Hospital Associations, and public health records from the two states and a variety of other sources.

The safety net community in the Kansas City metro area does a heroic job against long and increasing odds, which is described in The Safety Net Story available at this web site: http://www.marc.org/healthinitiative/assets/safety-net-story.pdf. However, the intent of this report is to identify issues facing the safety net community if they are going to continue to have the capacity to serve the uninsured and medically underserved. Further, the report is intended to identify needs and strategies for increasing the capacity of the safety net system as the demand for services increases. This report represents a summarization of the data collected and assessments made with respect to the safety net primary care health system in the metropolitan area. It should be mentioned that the Regional Health Care Initiative and the Metropolitan Mental Health Stakeholders have recently completed a similar assessment for the Behavioral Health Community, which is available on the Regional Health Care Initiative web site; http://www.marc.org/healthinitiative/.

This report highlights the mechanics of the delivery of care in the current non-hospital Safety Net system. Future reports will focus also on the complexity of the care currently delivered by Safety Net providers. This care is delivered in the setting of significant challenges including the remarkable social

issues related to poverty, markedly reduced health literacy including health literacy, language and cultural barriers, lack of regular connectivity to patients because of frequent changes in patient housing, lack of phone service and lack of transportation.

Following are key conclusions that will be discussed at greater length in the following sections:

> Conclusion #1 – There is a substantial and increasing need for safety net services in the region that cannot be met with the existing capacity of the system.
>
> Conclusion #2 – System-wide there is adequate safety net physical plant to serve additional patients, as measured by exam room space, but the capacity is not evenly distributed across the metro area.
>
> Conclusion #3 – In terms of medical staffing the system is currently slightly strained in terms of medical staff per patient and clearly cannot add any capacity without adding additional medical, clinical, and administrative staff. The need for medical staff and the safety net staff available are not matched across the region. In addition, safety net clinics, like all clinics, face challenges in hiring and retaining a diverse medical staff.
>
> Conclusion #4 – There is inadequate evening and weekend service for the safety net population.
>
> Conclusion #5 – Safety net clinics and other safety net providers do not currently have the staff, funds or technologic capacity to participate across providers and institutions with electronic health records and a health information exchange. Further, there is not a single health information exchange system that health providers can reliably participate in.
>
> Conclusion #6 – There is inadequate, standardized, accessible data for the region both on the health of the population and the state of health care across all providers of care both safety net and insurance-based care.
>
> Conclusion #7 – Although the Regional Health Care Initiative focused on primary care, specialty care and chronic disease management are also major issues in providing comprehensive, quality health care to those who are uninsured or medically underserved.

The report that follows consists of a set of findings and supporting documentation that leads to each of the conclusions. The report concludes with a set of recommendations and elaboration that MARC and the Regional Health Care Initiative staff feel flow from these conclusions. These recommendations are:

> Recommendation #1 – Monitor demand for safety net services and the capacity of the safety net system to meet that demand and better understand both the nature of that demand and the capacity of the safety net system to meet that demand.
>
> Recommendation #2 – Expand weekend and evening hours, and daytime hours when available, for safety net clinics and generally take every opportunity to use existing facilities to their fullest extent as a strategy to expand the capacity of the safety net system, serve additional patients, and provide improved access to care.

Recommendation #3 – Invest in additional health care professionals and social workers for safety net clinics and provide aid and assistance to safety net clinics in recruiting and retaining health care professionals.

Recommendation #4 – Expand safety net capacity in Johnson County, north of the river, eastern Jackson County, Lafayette County, and south Kansas City and Cass County.

Recommendation #5 – Work with the safety net community to enhance their ability to implement and use electronic medical records and participate in a health information exchange.

Recommendation #6 – Expand the region's ability to access and analyze public health and disease incident data in order to better understand where the most effective interventions may be.

Recommendation #7 – Continue to monitor and assess the need for enhanced specialty care in the region and support specialty care and chronic disease management initiatives.

## Demand for Safety Net Services

An important element in assessing the capacity of the safety net system is to determine the current and future demand for these services. With respect to safety net services this demand principally comes from those who are uninsured and those on Medicaid*. Following are key findings with regard to current and anticipated demand for services.

**Key Finding – MARC's current estimate for the uninsured in the eight-county metro area is 245,439. This is considerably higher than the 2000-estimate in the Lewin Uninsured Study, which was 190,863.**

The increase in uninsured in the metro area from the 190,863 estimate in the 2000 Lewin Uninsured Study to the 2008 MARC estimate of 245,439 constitutes an approximate increase in the uninsured of 28%. It is anticipated that the number of uninsured will continue to climb during the economic downturn as workers are laid off and more businesses cut costs by eliminating health coverage.

The MARC estimate was prepared using the 2008 Current Population Survey and the 2005 to 2008 American Community Survey, both produced by the U.S. Census Bureau. This estimate covered the counties of Johnson, Leavenworth, and Wyandotte in Kansas and Cass, Clay, Jackson, Lafayette, and Platte in Missouri. The Lewin Uninsured Study numbers, which were cited in the Health Management Associates 2006 study *Kansas City Metropolitan Health Access Policy Assessment*, covered the same counties except it also covered Ray County in Missouri and did not include Lafayette County.

**Key Finding – As of March 2008 there were 203,989 individuals receiving Medicaid benefits in the eight county metro area.**

The Medicaid* figures were provided by the respective states. The eight counties include Johnson, Leavenworth, and Wyandotte in Kansas and Cass, Clay, Jackson, Lafayette, and Platte in Missouri.

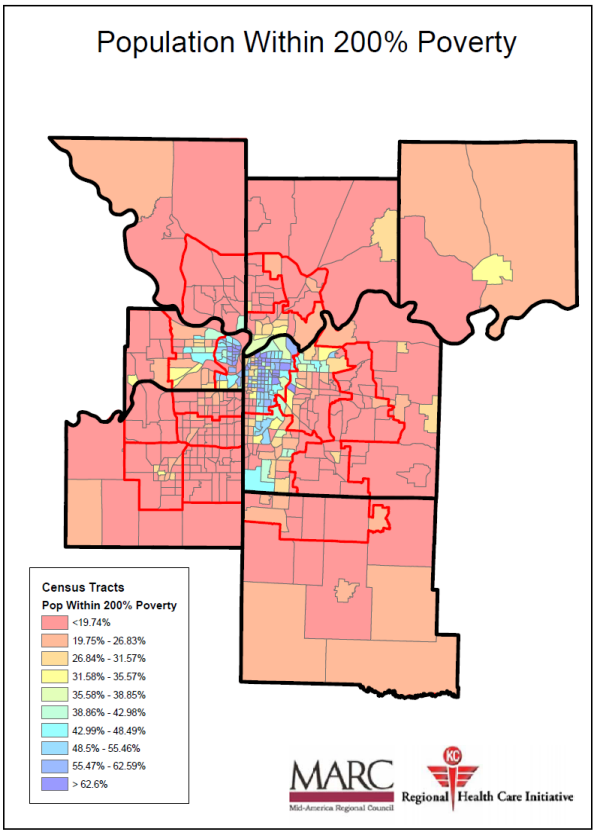
**Key Finding – The safety net population totals 449,428 for the eight county metro area, which is 25% of the population of the eight county metro area.**

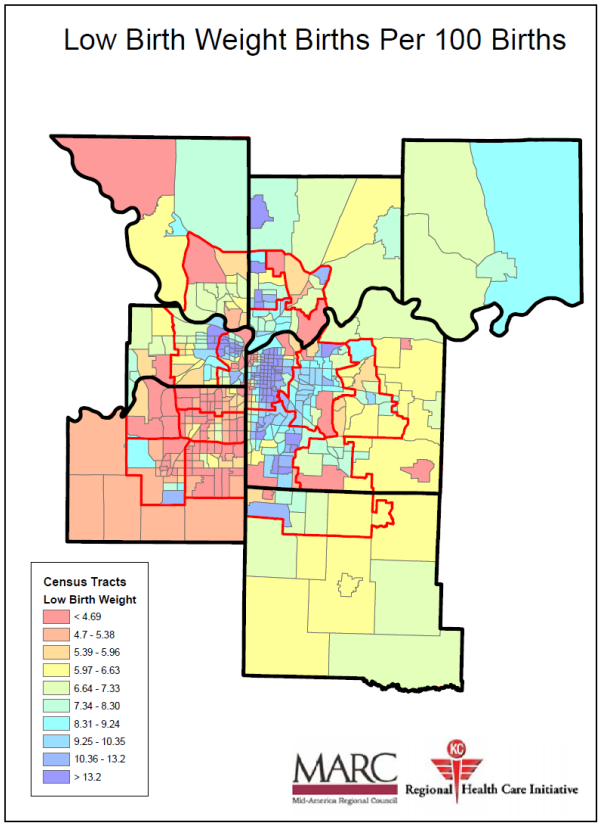
The safety net population of the uninsured and those on Medicaid comprises almost 25% of the eight-county metropolitan population. This is the population that is the principle clientele of the safety net clinics.

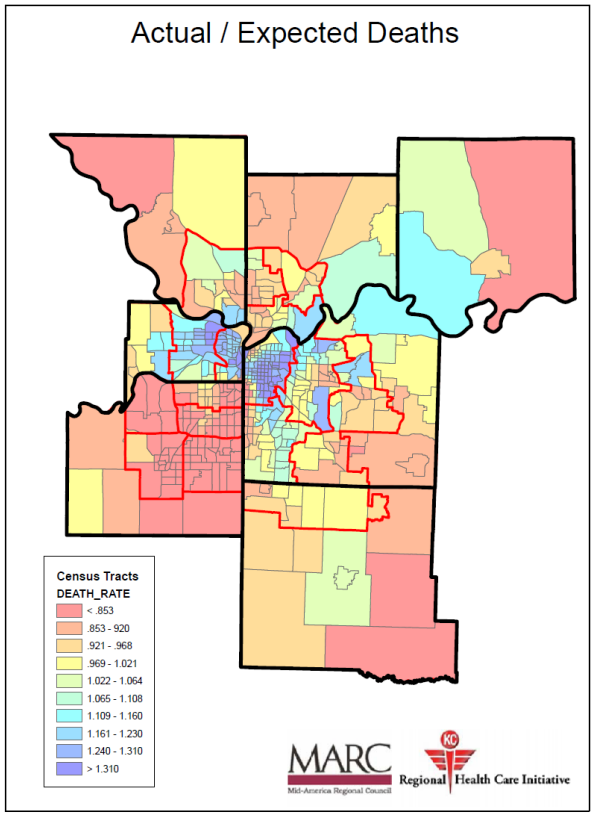
The metropolitan population for the eight counties, based on an estimate using the 2005 to 2008 American Community Survey, is 1,792,769.

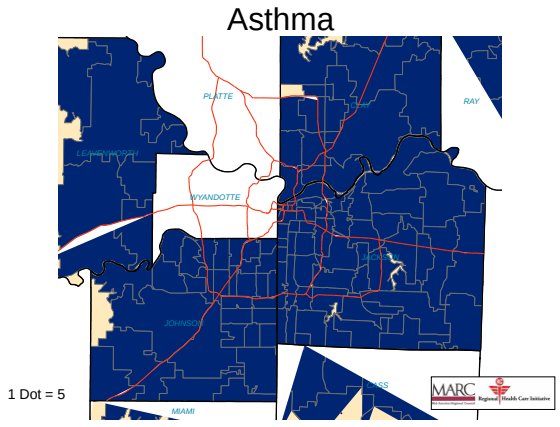
*Medicaid is a jointly funded, Federal-State health insurance program for low-income and needy people. It covers children, the aged, blind, and/or disabled and other people who are eligible to receive federally assisted income maintenance payments.

**Key Finding – There is a significant health disparity for people living in low-income and minority areas with increased risk of low birth weight babies, higher incidence of death than expected, and higher incidence of disease, such as asthma.**




**Data reported by patient zip code.**

The maps above demonstrate clearly a high degree of correlation between poverty and its location within the metro area and the incidence of low birth weight babies; actual vs expected deaths; and the incidence of asthma. The data includes census data, state and local public health data and data from the study of emergency department visits.

**Key Finding – All parts of the metropolitan area have a significant population of residents who are uninsured or on Medicaid.**

As can be seen by the table below every county in the metropolitan area has a significant portion of their population that is uninsured or receives Medicaid. However, there is considerable variation across counties. Over 40 percent of Lafayette County's population is uninsured or on Medicaid while a third of Wyandotte and Jackson Counties area. On the other hand only thirteen percent of Platte County residents are uninsured or on Medicaid and less than sixteen percent in Johnson County.

Johnson and Wyandotte Counties provide an interesting contrast. While in terms of percentages Johnson County's rate of uninsured and Medicaid is half that of Wyandotte County, because of its sheer size in terms of absolute numbers Johnson County has almost 30,000 more people in these categories than Wyandotte County. However, Johnson County's story is even more complicated since a large portion of their uninsured is residents with incomes over 200% of poverty. Despite that, Johnson County and Wyandotte County have roughly the same number of residents, just over 40,000 each, who are uninsured with incomes under 200% of the poverty rate or on Medicaid. This indicates the migration of those in poverty to the wealthier suburbs, which presents challenges in providing them services since these services, such as safety net clinics, are often concentrated in traditionally low income areas. See the next section for a further discussion of this issue.

**Uninsured & Medicaid Population**
**Kansas City Metropolitan Area**

| | | Uninsured | | | Total | |
|---|---|---|---|---|---|---|
| | Population | Below 200% Poverty | Above 200% Poverty | Medicaid | Uninsured & Medicaid | % of Pop |
| **Cass County** | 93,607 | 7,244 | 5,299 | 9,992 | 22,535 | 24.1 |
| **Clay County** | 203,289 | 15,040 | 11,860 | 18,841 | 45,741 | 22.5 |
| **Jackson County** | 653,556 | 73,337 | 32,023 | 108,295 | 213,656 | 32.7 |
| **Lafayette County** | 31,585 | 3,791 | 5,189 | 4,669 | 13,649 | 43.2 |
| **Platte County** | 82,364 | 4,476 | 1,558 | 4,913 | 10,946 | 13.3 |
| **Missouri Total** | 1,064,401 | 103,888 | 55,930 | 146,710 | 306,527 | 28.8 |
| **Johnson County** | 509,862 | 16,749 | 38,511 | 24,031 | 79,291 | 15.6 |
| **Leavenworth Cty** | 66,982 | 3,243 | 4,637 | 5,214 | 13,094 | 19.5 |
| **Wyandotte County** | 151,524 | 14,885 | 7,597 | 28,034 | 50,516 | 33.3 |
| **Kansas Total** | 728,368 | 34,877 | 50,745 | 57,279 | 142,901 | 19.6 |
| **Metropolitan Total** | 1,792,769 | 138,765 | 106,674 | 203,989 | 449,428 | 25.1 |

Population and uninsured estimates from 2005-2008 American Community Survey and 2008 Current Population Survey, U.S. Census Bureau. Medicaid data as of March 2008 from states of Missouri and Kansas.

**Key Finding – The current safety net system of clinics is at capacity and is unable to serve a significant number of the safety net population not already being served.**

Based on survey data from 2007 the safety net clinics served 101,592 patients during that year, which is 22 percent of the safety net population. The remaining 350,000 members of the safety net population are either getting their care from hospital related primary care clinics, particularly Truman Medical Centers' and Children's Mercy clinics, from private providers that accept Medicaid, hospital emergency rooms, they do not need care, or they are going without care. MARC was unable to collect data on hospital related safety net primary care (**this is likely significant**) and private providers, but plans to include this in subsequent reports. A subsequent section will provide information on emergency room visits and the uninsured. Individuals that do not receive regular primary care are more likely to need emergency room services and need more extensive care for conditions that have gone untreated.

It is very difficult to draw conclusions about the need for additional safety net capacity and the extent to which uninsured and Medicaid recipients have access to adequate, quality care without fully understanding the extent to which hospital based or hospital affiliated clinics and private providers are providing care to the uninsured and Medicaid recipients. This should be a primary focus of Recommendation #1.

The capacity of the safety net clinics will be discussed further in subsequent sections. Suffice it to say that based on current staffing and acceptable ratios of doctors and nurse practitioners to number of patients current staffing is seeing more patients than would be expected based on these ratios. Resource restrictions and safety net clinic needs, such as for bilingual staff, make it very difficult to add capacity.

**Conclusion #1 – There is a substantial and increasing need for safety net services in the region that cannot be met with the existing capacity of the system.**

Those who are uninsured or medically underserved constitute over a quarter of the Kansas City metropolitan area population. This number is growing and anticipated to continue to increase at least through the economic downturn. Those who are uninsured or medically underserved tend to be poorer and are more likely to suffer from medical conditions and need medical services than the general population. The safety net providers included in this report serve almost a quarter of the medically underserved and uninsured population, leaving a significant proportion of the metro population either served by other means or not served at all.

The safety net system is currently operating at capacity and is not in a position to adequately serve additional patients without increased capacity. This is a critical problem if data ultimately shows that a large proportion of the uninsured and medically underserved are unable or unwilling to access safety net care. The issue of capacity will increase as more people become uninsured.

## Safety Net Facility Capacity

A key element in assessing safety net capacity is the availability of facilities and their distribution with respect to the safety net population (see map on page 13). Following are key findings with respect to the availability of safety net facilities.

**Key Finding – Safety net clinics have some exam room capacity that could accommodate an additional 15,630 daytime and an additional 170,050 evening and weekend visits.**

According to a 2007 survey of 33 safety net clinics they had a total of 241 exam rooms. Using Veterans Administration methodology and very conservative assumptions, as noted, the following calculation of available exam rooms can be made. Assume each patient visit takes one hour and that a clinic is open five days per week seven hours per day, then a single exam room can accommodate 35 visits in a week. Assuming clinics are open 48 weeks per year then each exam room can accommodate 1,680 visits in a year. However, exam rooms are not available 100 percent of the time so assume a utilization rate of 70 percent so that each exam room can only accommodate 1,176 visits in a year. The 230 available safety net exam rooms could accommodate a total of 283,416 visits a year. Currently, based on the 2007 clinic survey, the safety net clinics accommodate 267,786 visits in a year. This means, in terms of exam room capacity, assuming very conservative utilization, the safety net clinics could accommodate another 15,630 daytime visits in a year.

Using a similar analysis if we assume clinics were open three hours each evening and six hours on Saturdays that would be an additional 21 hours each week, or an additional 21 visits each week for each exam room. If we multiply that by 48 weeks in a year and 241 exam rooms and that exam room utilization is 70% this indicates that the existing exam rooms could accommodate 170,050 evening and weekend visits.

Again it is important to mention the caveats, that we are speaking in terms of exam rooms and this does not account for the need for additional equipment, support space, staffing, security, ancillary personnel, insurance and variable supplies such as utilities and disposable supplies.

**Key Finding – Safety net clinics and exam rooms are not distributed across the metropolitan area in the same distribution that the uninsured and medically underserved are distributed. This means that in some areas the uninsured and medically underserved have a more difficult time accessing safety net services.**

**Distribution of Exam Rooms and visits**

| | Exam Rooms | Exam Room Capacity | Actual Visits | Actual Visits vs Calculated Capacity |
|---|---|---|---|---|
| **Cass County** | 0 | | | |
| **Clay County** | 11 | 12,936 | 2,046 | 0.16 |
| **Jackson County*** | 138 | 162,288 | 188,716 | 1.16 |
| **Lafayette County** | 5 | 5,880 | | |
| **Platte County** | 5 | 5,880 | 3,130 | 0.53 |
| **Johnson County** | 10 | 11,760 | 10,204 | 0.87 |
| **Leavenworth County** | 4 | 4,704 | 2,014 | 0.43 |

| | | | | |
|---|---|---|---|---|
| **Wyandotte County** | 68 | 79,968 | 61,676 | 0.77 |
| **Metro Total** | 241 | 283,416 | 267,786 | 0.94 |
| Exam rooms from 2007 clinic survey | *15 in eastern | Jackson County | | |

The table on the preceding page illustrates the distribution of safety net exam rooms and those in need of safety net services. The table illustrates that some counties have more exam rooms for the safety net population they serve than do other counties. In particular Johnson County and north of the river, given their safety net populations, have the fewest number of exam rooms and clinic locations. Also, although not fully evident from the table, eastern Jackson County and southern Jackson County, Lafayette County and Cass County also have a lack of facilities.

The map on page 13 illustrates the distribution of clinics and those in need of safety net services.

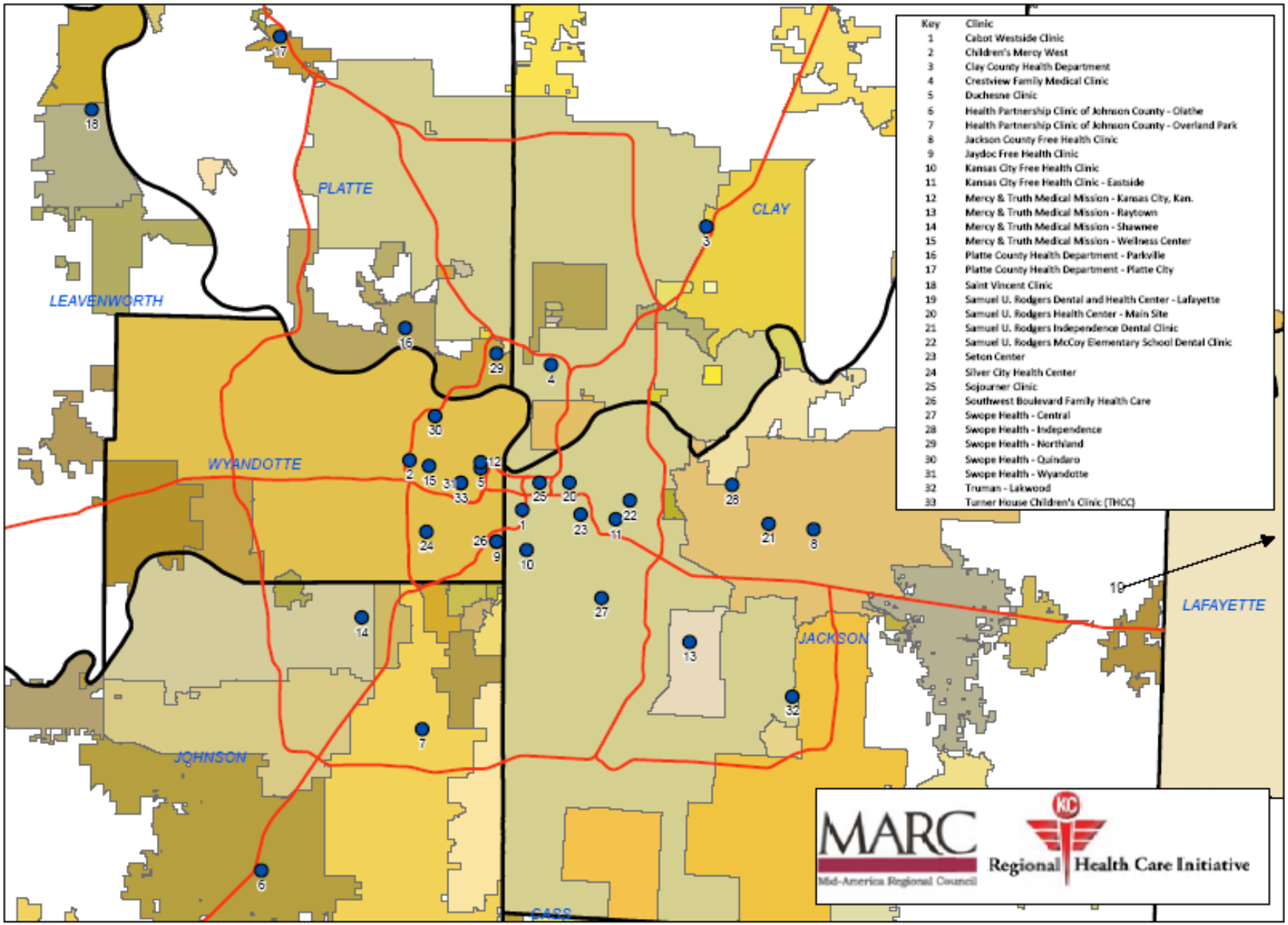
However, some caution needs to be exercised in drawing conclusions from this data. First, although most of the clinics and exam rooms are concentrated in the urban core of Kansas City, MO, and Kansas City, KS, there is a reason for this; this is still where two-thirds of the uninsured and medically underserved are located. There is some evidence that some of those who are uninsured or medically underserved can and do cross county and state lines to find services. Finally, all areas of the region appear underserved in terms of adequate safety net services it is just that some areas are relatively more underserved than others.

**Conclusion #2 – System-wide there is adequate safety net physical plant to serve additional patients, as measured by exam room space, but the capacity is not evenly distributed across the metro area.**

Based on the number of safety net clinic exam rooms that currently exist and the current number of patients the safety net clinics see, these clinics have the exam room capacity to see 6 percent more patients during the day and an additional 63 percent more patients on evenings and weekends. This is a potential resource that could be employed to help meet the increased demand for safety net services. However, there are a couple of caveats to this conclusion. First, the availability of physical space does not necessarily apply to availability of support equipment such as imaging equipment or support space such as lab space, nor in the distribution of medical staff, which will be discussed in the next section.

Second, the space that is available is not necessarily distributed to match the distribution of the uninsured and the medically underserved or of current visits. Clinics are concentrated in the areas of greatest need, but as the low income population has dispersed physical clinic space has not necessarily followed. Most important, as will be demonstrated in the next conclusion, the availability of medical and support staff is the most important determinant of capacity.

# Kansas City Safety Net Clinic Locations



## Safety Net Clinic Staffing

The key element in assessing safety net capacity is the ability to provide medical staff that can provide quality service to those who are uninsured or on Medicaid. Following are several key findings with regard to safety net medical staffing.

**Key Finding – Current medical staffs in the safety net clinics are fully utilized and are working at slightly above capacity.**

Calculating the current capacity of the safety net systems is a complicated matter because there are not hard and fast standards against which to measure the system. However, by developing several comparisons it is possible to get some idea of the capacity of the current system and to the extent it is able to meet the needs of patients and the larger medically underserved population.

Based on standards provided by Cathy Harding, executive director of the Kansas Association for the Medically Underserved, safety net clinics should have at least one full-time doctor for every 1,500 patients and can add at least an additional 750 patients for each mid-level nurse. Based on these standards we would expect that the safety net doctors and mid-level practitioners reported in the 2007 safety net survey should be able to care for at most 97,013 patients. This is the maximum healthy capacity of the safety net system. Based on the 2007 safety net survey the safety net system was actually caring for 101,592 patients.

**Key Finding – Wait times at safety net clinics are long indicating that clinics are at capacity and it is impairing access to care.**

Although a formal survey of wait times has not been done, anecdotal reports from clinics indicate that wait times are substantial making access to care difficult, especially for non-emergency care. Some clinics are unable to take new patients because they have no more capacity.

One local clinic reported gathering data on the number of callers to the clinic that were requesting care and were turned away because all of the general medicine appointments had been filled. Over a five week period of time the average number of calls that exceeded available appointments was 242 per week. This number is estimated to be underreported by 10%-20% as many people simply hang up and do not wait to talk to someone on the phone.

**Key Finding – The ratio of safety net primary care doctors to safety net patients is much lower than the ratio of all primary care doctors to the overall population.**

One measure of disparity in care for those who are uninsured or medically underserved is the ratio of primary care doctors for this population compared to the ratio of primary care doctors for the general population. Based on data from CareEntrust and the state of Kansas there are 761 persons in the eight county region for every primary care doctor. However, just for the safety net population that actually uses safety net clinics each year, 101,592 patients, there are 2,331 patients for every primary care safety net doctor. If we consider the entire population of the uninsured and those on Medicaid as the safety net population there are 10,314 persons in this population for every primary care doctor in the safety net system. Again some of the safety net population may find primary care through hospital clinics or

through private charity care, but these numbers illustrate the disparity in primary care physicians given the overall safety net population.

**Key Finding – Safety net services are not sufficient in any part of the metro area to meet demand, but some areas are more underserved than others.**

Safety net clinics in all parts of the metro area are operating at capacity and all parts of the region have substantial unmet need in terms of access to health care for the uninsured and those on Medicaid. Using a very conservative estimate from the National Center for Health Statistics, National Ambulatory Medical Care Survey, 2005, of 1.97 primary care visits per year for each person in the population, the number of primary care visits can be estimated from the safety net population. We can then compare this number with the actual number of safety net visits that clinics are experiencing.

**Distribution of Expected Safety Net Visits vs Actual Safety Net Visits**

| | Safety Net Pop | Expected Visits | Actual Visits | % Expected |
|---|---|---|---|---|
| **Cass County** | 22,535 | 44,394 | | |
| **Clay County** | 45,741 | 90,109 | 2,046 | 2.27% |
| **Jackson County** | 213,656 | 420,902 | 188,716 | 44.84% |
| **Lafayette County** | 13,649 | 26,889 | | |
| **Platte County** | 10,946 | 21,564 | 3,130 | 14.51% |
| **Missouri Total** | 306,527 | 603,858 | 193,892 | 32.11% |
| | | | | |
| **Johnson County** | 79,291 | 156,203 | 10,204 | 6.53% |
| **Leavenworth County** | 13,094 | 25,796 | 2,014 | 7.81% |
| **Wyandotte County** | 50,516 | 99,517 | 61,676 | 61.98% |
| **Kansas Total** | 142,901 | 281,515 | 73,894 | 26.25% |
| | | | | |
| **Metropolitan Total** | 449,428 | 885,373 | 267,786 | 30.25% |

Safety Net Pop=Uninsured under 400% poverty level + those on Medicaid from 2005-2008 American Community Survey and 2008 Current Population Survey, U.S. Census Bureau & March 2008 state Medicaid data.

Expected visits = 1.97 primary care visits per person, National Center for Health Statistics, National Ambulatory Medical Care Survey, 2005.

Actual visits from 2007 safety net survey.

The above data does not include visits to hospital-based primary care clinics or private providers, except as noted on the map on page 13.

The information in the table above indicates that all areas of the region are seeing fewer safety net visits than would be expected given the population. Overall they are only seeing about thirty percent of the visits that would be expected. Some of these additional visits may be served by large volume hospital out-patient clinics, ERs or private providers. Many in the safety net community may simply be going without care. However, more data is needed to make a definitive determination.

Although all areas of the region are underserved, the distribution of capacity versus need is not evenly distributed across the region. Some areas of the region experience greater need compared to the safety net resources that are available. This can be seen in the table above in the variance of actual visits to expected visits.

The table below compares the distribution of the safety net population compared to the distribution of safety net practitioners, both doctors and mid-level practitioners.

**Distribution of Safety Net Medical Staff**

| | | | Safety Net Practitioners | | | |
|---|---|---|---|---|---|---|
| | Safety Net Pop | % of Total | Docs | Mid-Level | Total | % of Total |
| **Cass County** | 22,535 | 5.0% | | | | |
| **Clay County** | 45,741 | 10.2% | | 1 | 1 | 1.17% |
| **Jackson County** | 213,656 | 47.5% | 28.05 | 27 | 55.05 | 64.18% |
| **Lafayette County** | 13,649 | 3.0% | 0.5 | 1 | 1.5 | 1.75% |
| **Platte County** | 10,946 | 2.4% | | | | |
| **Missouri Total** | 306,527 | 68.2% | 28.55 | 29 | 57.55 | |
| **Johnson County** | 79,291 | 17.6% | 1.075 | 1.5 | 2.575 | 3.00% |
| **Leavenworth County** | 13,094 | 2.9% | 0.9 | 1.75 | 2.65 | 3.09% |
| **Wyandotte County** | 50,516 | 11.2% | 13.05 | 9.95 | 23 | 26.81% |
| **Kansas Total** | 142,901 | 31.8% | 15.025 | 13.2 | 28.225 | |
| **Metropolitan Total** | 449,428 | | 43.575 | 42.2 | 85.775 | |

Safety Net Pop=Uninsured under 400% poverty level + those on Medicaid from 2005-2008 American Community Survey and 2008 Current Population Survey, U.S. Census Bureau & March 2008 state Medicaid data.
Practitioners from 2007 safety net survey.

Both tables illustrate that Johnson County and north of the river are considerably underserved in terms of the amount of expected visits that are served and in terms of the safety net medical staff compared to the safety net population. (This also is reflected in the distribution of exam rooms from Conclusion #2.) The lack of clinic capacity versus safety net population is also apparent in eastern Jackson County, Lafayette County, and south Kansas City and Cass County. Access to health care in these communities is further exacerbated by the fact that the uninsured and Medicaid population is more dispersed and thus has more difficulty learning about safety net services and traveling to them.

It is important to reiterate that this unequal distribution in resources is a reflection of where those in need were concentrated and still are concentrated. However, many poor people have now moved to the suburbs and many middle class families now find themselves without health insurance. An added caution needs to be mentioned with respect to Wyandotte County. Although they appear to be relatively better served, they also see a number of Johnson County residents, do not have access to public hospital primary care clinics as do residents in Jackson County, and have far fewer private primary care doctors.

**Key Finding – Data indicates that a significant number of the uninsured are receiving primary care through emergency room visits.**

One important measure of safety net capacity is the extent that the uninsured are seeking primary care through emergency room visits. Based on 2006 emergency room data for the metropolitan area (less one hospital) from the Missouri and Kansas Hospital Associations, it was determined that there were

123,800 emergency room visits by the uninsured. This represents 22 percent of all emergency room visits as opposed to the representation of the uninsured in the general metro population of 13.7 percent. These represent visits that could be provided in an outpatient primary care setting.

The review of 2006 ER visits in the Kansas City metro area included a sampling of the top twenty primary and secondary diagnosis codes for each visit. This sampling was about 19 percent of all ER visits. Doctors associated with the Regional Health Care Initiative identified five primary codes which they felt represented primary care visits (visits that appear to be of a non-emergency type). These codes are 462: acute pharyngitis (sore throat); 465.9: acute upper respiratory infections; 5990: urinary tract infection; 724.2: low back pain; and 787.03: vomiting alone. Based on this data, 26 percent of uninsured visits to the emergency room were for primary care or approximately 32,188 visits. These are visits that could be dealt with in outpatient settings thus freeing up emergency room capacity and providing the patient more appropriate care.

**Conclusion #3 – In terms of medical staffing the system is currently slightly strained in terms of medical staff per patient and clearly cannot add any capacity without adding additional medical, clinical, and administrative staff. The need for medical staff and the safety net staff available are not matched across the region. In addition, safety net clinics, like all clinics, face challenges in hiring and retaining a diverse medical staff.**

The safety net system, according to a 2007 survey of safety net clinics, employs either as paid staff or volunteers 44 physicians and 42 mid-level practitioners (such as nurse practitioners) to serve over 100,000 patients with over 265,000 visits. Based on industry standards the current staff is serving more patients than would be customary for this size of medical staff. This indicates that the safety net system cannot increase capacity without adding medical and support staff.

The issue of staffing is not just one of having adequate financial resources. The safety net clinics face a daunting task of finding and recruiting medical staff, even if they have resources. Sometimes this is a matter of competing in terms of salary and benefits with the private sector. Safety net clinics also face additional issues such as finding bi-lingual and ethnically diverse medical staff.

The safety net clinics not only need additional medical and support staff if they are to increase their capacity to serve the uninsured and medically underserved, but they face a critical issue of keeping and replacing existing staff just to maintain services to their current patients.

## Weekend and Evening Safety Net Services

One issue with regard to the capacity of the safety net system is the ability of the system to serve patients on evenings and weekends. Because of work obligations this is often the only time when the uninsured can access care. In addition urgent care situations often occur during these time periods. Following are several key findings which address this issue.

**Key Finding – There is little safety net primary care available on weekends or in the evenings.**

The Mid-America Regional Council conducted two surveys with safety net providers regarding their hours of operation. The first survey was an email survey in December 2007 followed by a telephone survey to update the data in September 2008. The surveys gathered information regarding the hours that safety net services are available during regular business hours, weekday evenings and weekends (total hours = 982.25 hours). The results indicate limited availability of care in the evenings (35.5 hours or 3.6 % of total hours) and a significant lack of available care on weekends (19.5 hours or 2% of total hours). It is interesting to note that between 2007 and 2008 the number of evening/weekend hours was reduced by 5.5 hours from the time the initial survey was conducted.

**Key Finding – Emergency Room data indicates that there are needs for additional weekend and evening primary care services.**

The hospital ER data discussed in the previous section indicates that for 2006 twenty six percent of all uninsured visits to the ER were for primary care and of those 27 percent occurred during evening hours or daytime on Saturdays. This indicates that in 2006 there were 8,578 uninsured persons that sought primary care services in the ER either on weekday evenings or on Saturdays during the day.

**Key Finding – Per Conclusion #3 there is a lack of safety net capacity due to lack of available staffing.**

Conclusion #3 indicated that there was a lack of safety net capacity because of a lack of medical staff. The lack of medical staff extends to weekend and evening hours and contributes to the lack of system capacity.

**Conclusion #4 – There is inadequate evening and weekend service for the safety net population.**

Safety net clinics are primarily open during weekday daytime hours. However, the need for safety net primary care services does not always occur during these hours. Sometimes there is a need for acute care, but there are few options for those who are uninsured, except for the emergency room. Others are unable to visit a clinic during the day because they are employed, but have no insurance. This lack of evening and weekend services is compounded by the increasing number of those who are uninsured or on Medicaid. The Safety Net Collaborative, a coalition of safety net clinics, in late 2009 initiated a weekend and evening program with grant support from the Health Care Foundation of Greater Kansas City and the REACH Healthcare Foundation.

## Health Information Technology

The Regional Health Care Initiative has spent a considerable amount of time investigating health information technology and how it impacts safety net providers. This is a complicated issue for all health care providers, not just the safety net community, and the parameters of the discussion are constantly changing. The use of health information technology holds out the hope of increasing the quality of care for patients while at the same time making health care more efficient. But implementing such systems is complicated, uncertain, and expensive.

**Key Finding – Most of the safety net providers do not have sophisticated health information systems or staff capable of managing such systems.**

This finding is probably true of most health care providers, not just safety net providers. If safety net clinics are going to take advantage of electronic medical records and other health information technology they will need to enhance their capacity to understand, assess, implement, use and maintain such systems. Safety net clinics do not have the financial resources to develop such capacity since most resources go into keeping the doors open and providing basic care.

**Key Finding – There is considerable uncertainty within the safety net community about where exactly health information technology is headed and what the appropriate strategy is for their clinics and the safety net system.**

There are a number of initiatives, policies, and mandates with respect to health information technology emanating out of the federal and state governments and from private health system players such as insurance companies and hospitals. It is difficult for individual clinics and the safety net system to know what is the appropriate strategy that will maximize the benefits to their patients and their operations while being compatible with the direction of the rest of the industry. It is also difficult to know which vendors are promoting the right strategy and will be around to see that strategy through. Given the high level of uncertainty it is very difficult for clinics to devote financial and staff resources to this issue when there are so many other needs. Implementation requires not just a purchase of software and hardware but considerable staff time to assess and rework clinical and administrative processes. For organizations that are facing budget constraints or that rely on volunteers, there are also considerable challenges in maintaining adequate training.

**Key Finding – The ability to exchange information between clinics and other members of the safety net system is important, but the health information exchange landscape in the metro area is currently confused and fragmented.**

An important element of health information technology is the ability to exchange information with other health care providers and other parts of the system. Such an exchange can facilitate care by making sure that a patient's record is always with them no matter where they are in the system. It can also help to facilitate referrals benefiting both the patient and clinic operations and can provide clinics and the system with information to make decisions on.

However, it is very difficult to establish a sustainable health information exchange. First of all many of the clinics do not have the technology or staff capacity to effectively use or enter such a system. Also there are currently a number of such systems or proposed systems in the metro area, each serving a

different need for different constituencies. To some extent safety net clinics have not had much of a voice in the discussions about what a health information exchange system should do and how it should be set up. Until there is agreement on these points and adoption of a regional platform it will be difficult for clinics and other health providers to exchange data and fully benefit from health information technology.

**Conclusion #5 – Safety net clinics and other safety net providers do not currently have the staff, funds or technologic capacity to participate across providers and institutions with electronic health records and a health information exchange. Further, there is not a single health information exchange system that health providers can reliably participate in.**

In order to have an effective electronic health records system and an efficient exchange of those records to benefit patient's health care there are two basic requirements:

- Individual health care providers and other elements of the health care system need adequate technology capacity in terms of equipment, software, and trained staff to implement, use and maintain electronic medical records and other elements of health care information technology.

- There needs to be a uniform system for exchange of health information across the many providers and servicers of health care.

Neither of these conditions exists within the safety net community and to a large extent throughout the health care system. Although some clinics are on the path to developing the technology capacity to participate in electronic medical records others are not. This stems from several causes including lack of resources and the fact that a number of the clinics are small. Also safety net providers, like all medical professionals, have concerns about privacy, compliance with regulations, and the legal aspects of data sharing.

An efficient exchange of medical information is very important as the health care system becomes more complex and interdependent. Unfortunately there is currently not a single health information exchange that can affordably and effectively meet all of the needs of the safety net health care system. There are currently several systems each serving a different population and need with no one system the clear vehicle for health information exchange among safety net providers.

## Health and Safety Net Data

The Regional Health Care Initiative has had as one of its premises that decisions about health care and about the health care system should be made based on sound data. Data is critical in order to make sound decisions on what interventions will have the greatest, most effective impact both on the health of individuals and populations and on the health of the system. The availability of data and the analysis of data becomes a critical component in an effective health care strategy.

**Key Finding – There is not adequate, uniform public health data available for the metropolitan area, especially at sufficiently localized geographies.**

Through investigations with local health departments and state and federal agencies we have determined that there is not a consistent set of public health data across the region. This is especially true at geographies that would allow the community to investigate distribution of disease and compare them to demographic and environmental factors.

MARC was able to piece together some public health data from health departments, state agencies, and through the use of ER data. However, the information was generally not readily accessible, was not comparable, in many cases, across the region, and was not easily related to each other. The ER data, while extensive, is not fully representative of disease occurrence in the metro area, however, it does give an interesting picture of where disease is occurring, at least as it impacts the ER.

**Key Finding – There is not adequate, comparable data about safety net operations.**

Data on the operations of the safety net system in terms of staffing, patients and visits, types of visits, and location of patients, is not routinely collected. There is not an agreed upon set of data and definitions for data that should be collected and an agreement on how that data would be used. A number of clinics do not have systems to easily collect and produce data on operations.

Of particular note is the lack of information on hospital related and private practice services for the uninsured and medically underserved. It is very difficult to make definitive assessments of current safety net capacity and safety net system needs without this data.

**Conclusion #6 -- There is inadequate, standardized, accessible data for the region both on the health of the population and the state of health care across all providers of care both safety net and insurance-based care.**

There is inadequate data or convenient access to data on the health of the safety net population and the operations of the safety net system. This lack of access to current public health data hinders the health care system's and the community's ability to identify and address key health issues. Lack of consistent data on the safety net system's operation makes it difficult to assess how well the system is addressing the needs of the safety net community, where investments would be most beneficial for the health of this population, how system capacity and access is, or is not, keeping pace with rising demand for services.

## Specialty Care and Chronic Disease Management

Although the Regional Health Care Initiative focused on primary care it is evident that the provision of specialty care remains an issue for the safety net health care system. When patients of safety net primary care clinics need specialty care such as diagnoses, treatment, or surgery they must be referred to specialists for this care. Such specialists are not a part of the normal safety net system, which is predominantly a primary care model. How this care is provided and how patients find their way to this care is an important element of the capacity of the safety net system.

The identification, treatment, and management of chronic disease within the safety net population are important issues. Chronic disease can be a significant portion of safety net clinic and ER visits. Chronic disease can have a disproportionate impact on the health and well being of the uninsured and their families.

**Key Finding – Specialty care for the uninsured and medically underserved is in a situation where demand exceeds capacity.**

Currently specialty care is provided in different ways in different parts of the region. In Jackson County and Kansas City, Missouri, a significant amount of specialty care is provided through Truman Medical Centers, the region's only hospital whose primary mission is serving the safety net population. However, Truman is compensated for uninsured care only for residents of Jackson County and Kansas City, MO, and often has difficulty providing specialty care in a timely fashion because of patient loads and backups for certain specialties, as is experienced throughout the region. Children's Mercy Hospital provides a considerable amount of care to low income and uninsured children throughout the metro area.

Several years ago, recognizing the need for specialty care for the uninsured, the Medical Society of Johnson and Wyandotte Counties, and later the Metropolitan Medical Society of Greater Kansas City and Northland Health Access, established Access programs. These programs solicit specialty doctors and hospitals to donate care for a certain number of patients each year. The program matches patients in need with specialists and makes sure that all of the information the doctor needs is available at the visit. The program also arranges transportation and follow up care. The programs have been successful, but are limited in the number of patients they can serve and some of their specialties are booked up.

This indicates that demand continues to exceed capacity for safety net specialty care.

**Key Finding – Chronic Disease diagnosis and management is a major issue for those who are uninsured or medically underserved and for the safety net clinics that must treat them.**

Chronic diseases such as diabetes and asthma are a major health issue for those who are uninsured or medically underserved (see maps on page 7). There are several reasons for this. First of all those who are low income or uninsured are less likely to have their disease diagnosed than those in the general population because they are less likely to receive routine primary care. Once diagnosed because of issues of income or access they are less likely to manage their disease on a consistent basis. Left untreated, those with a chronic disease are more likely to have severe episodes that require a visit to the emergency room, thus probably accounting in part for the high rate of ER use by the uninsured. Diseases left untreated become much more difficult and costly to treat the disease.

Most safety net clinics provide some chronic disease management services. A few specialize in certain diseases, such as HIV/AIDS or diabetes. Since the safety net clinics are at capacity, it is difficult in some instances to provide additional chronic disease management services.. Chronic disease management requires regular access to medications, vaccinations, and ongoing disease education. These services require additional medical staff and resources.

**Conclusion #7 – Although the Regional Health Care Initiative focused on primary care, specialty care and chronic disease management are also major issues in providing comprehensive, quality health care to those who are uninsured or medically underserved.**

Despite the presence of a major public hospital in the metro area and two Access programs there is still a substantial need for specialty services for those who are uninsured. Access to specialty doctors is limited and is not provided on the same basis that primary care is provided.

Comprehensive chronic disease management is a major issue throughout the health care system and the safety net system is no exception. Low-income, minority and uninsured patients have a higher burden of chronic illness. However, those who are uninsured or medically underserved are more likely to go undiagnosed or poorly managed for periods of time before entering the safety net system thus making this a special issue for the safety net community. In addition that community is at capacity and it is difficult to provide additional chronic disease management without additional dedicated resources.

## Recommendations

This report has presented a number of findings and seven conclusions:

> Conclusion #1 – There is a substantial and increasing need for safety net services in the region that cannot be met with the existing capacity of the system.
>
> Conclusion #2 – System-wide there is adequate safety net physical plant to serve additional patients, as measured by exam room space, but the capacity is not evenly distributed across the metro area.
>
> Conclusion #3 – In terms of medical staffing the system is currently slightly strained in terms of medical staff per patient and clearly cannot add any capacity without adding additional medical, clinical, and administrative staff. The need for medical staff and the safety net staff available are not matched across the region. In addition, safety net clinics, like all clinics, face challenges in hiring and retaining a diverse medical staff.
>
> Conclusion #4 – There is inadequate evening and weekend service for the safety net population.
>
> Conclusion #5 – Safety net clinics and other safety net providers do not currently have the staff, funds or technologic capacity to participate across providers and institutions with electronic health records and a health information exchange. Further, there is not a single health information exchange system that health providers can reliably participate in.
>
> Conclusion #6 – There is inadequate, standardized, accessible data for the region both on the health of the population and the state of health care across all providers of care both safety net and insurance-based care.
>
> Conclusion #7 – Although the Regional Health Care Initiative focused on primary care, specialty care and chronic disease management are also major issues in providing comprehensive, quality health care to those who are uninsured or medically underserved.

Based on the findings and these key conclusions the Regional Health Care Initiative makes the following recommendations to the regional community:

**Recommendation #1 – Monitor demand for safety net services and the capacity of the safety net system to meet that demand and better understand both the nature of that demand and the capacity of the safety net system to meet that demand.**

Understanding the quantity and nature of the demand for safety net services is critical if the community is to make the most effective strategic investments going forward; investments that will have the greatest impact on improving the access to safety net care and the quality of that care.

The first step is to conduct an annual assessment of the number of individuals that are uninsured, are on Medicaid, and, if possible, the number that is uninsured and likely to need safety net services. Not only are the raw numbers needed, but an understanding of who is accessing the Saftey Net, where they live,

where they chose to access care, and their circumstances in order to better understand the nature of their healthcare needs.

Once a clearer understanding of demand has been developed, it is necessary to compare that to the capacity of the safety net system to meet that demand. This includes an annual assessment of services, staffing, patients, and visits for the safety net clinics and their distribution across the metro area. It also means the extension of this understanding of safety net capacity to other providers of care such as hospital-based primary care clinics and private providers.

Such an annual assessment is especially critical as the nature of health care and public support for health care continuously shifts. These changes will affect the nature of the demand for safety net services and possibly the capacity of the system to meet this demand.

**Recommendation #2 – Expand weekend and evening hours for safety net clinics and daytime hours when available and generally take every opportunity to use existing facilities to their fullest extent as a strategy to expand the capacity of the safety net system, serve additional patients, and provide improved access to care.**

A need for weekend and evening services has been identified as an effective way to expand care to the safety net population and make use of existing physical capacity. Weekend and evening care will help serve the working poor who cannot easily access care during business hours. The Safety Net Collaborative and the Regional Health Care Initiative have received funding to support a measured expansion of evening and weekend services and will be closely monitoring the program.

Beyond weekend and evening services the safety net community should seek out opportunities to use underutilized clinic space for expanded care or for special programs such as chronic disease management or wellness programs and funders should be open to funding these initiatives.

**Recommendation #3 – Invest in additional health care professionals for safety net clinics and provide aid and assistance to safety net clinics in recruiting and retaining health care professionals.**

The most direct way to increase capacity of the safety net system is to invest in new medical staff and their support. It will be important to couple this investment in additional medical staff with support services and development of initiatives to improve clinic efficiency so that the best possible use can be made of new medical staff.

Just as important as investing in new medical staff is providing assistance to clinics in hiring and retaining existing staff. This may be in the form of financial assistance or extended benefits or privileges, such as hospital privileges.

**Recommendation #4 – Expand safety net capacity in Johnson County, north of the river, eastern Jackson County, Lafayette County, and south Kansas City and Cass County.**

Data indicates that the uninsured and medically underserved are moving outward. The cores of Kansas City, Missouri, and Kansas City, Kansas, are still the areas of greatest concentration of those in need of safety net care and these areas continue to be underserved. However, the expansion of the safety net population in more suburban areas has not been matched by a commensurate expansion of safety net services. The uninsured and medically underserved in these areas present different issues than those

residing in the core because they are more dispersed making both communication and transportation an issue.

Clinics in these areas have been looking to expand services and these efforts should be supported. Different models have been tried and these should be closely monitored and evaluated to see if these might provide a better approach to providing safety net health care in these communities.

**Recommendation #5 – Work with the safety net community to enhance their ability to implement and use electronic medical records and participate in a health information exchange.**

The safety net clinics, not unlike other clinics in the health care system, have not taken full advantage of electronic medical records and health information exchange. Such systems may help clinics provide more effective and efficient care extending the quality and quantity of the care they can provide. In addition, there will be increasing expectations and requirements that health care providers use and participate in such systems. There needs to be a concentrated and coordinated effort to assess the best strategy for increasing the technology capacity of safety net clinics and assistance in implementing and using these technologies. In addition to the technology capacity of individual clinics there is a need to develop an effective, coordinated system to exchange medical information.

**Recommendation #6 – Expand the region's ability to access and analyze public health and disease incident data in order to better understand where the most effective interventions may be.**

Better access to health data and disease incident data would help the safety net community better assess the needs of the uninsured and medically underserved and design new strategies to prevent health issues or better manage these issues. The Health Care Foundation of Greater Kansas City is making a start by creating an accessible health data base for the region in conjunction with the Kansas Health Institute. However, continued work is needed to develop access to more health and disease data reflecting smaller geographies and the analysis and use of that data to develop intervention strategies. It is strongly felt that a more strategic approach to health care will result in better outcomes for the uninsured and medically underserved and such a strategic approach requires reliable data, thorough analysis, and a commitment to use the analyses to develop new strategies.

Special emphasis should be given to developing a picture of chronic disease incidence in the safety net population and the development of interventions to address specific issues that become apparent.

**Recommendation #7 – Continue to monitor and assess the need for enhanced specialty care in the region.**

Although the Regional Health Care Initiative has been focused on primary care and the safety net system providing that care, the need for expanded access to specialty care cannot be overstated. On the Missouri side, a considerable amount of that specialty care is provided through Truman Medical Center the metro area's only public hospital. Their capacity is continuously strained and they do not serve the entire metro area, which puts pressure on other parts of the health system or simply means that safety net patients go without specialty care.

The metro area's two medical societies have established Access Programs, which recruit specialty doctors to devote charity time to a set number of patients and recruit hospitals to provide support

services. The programs have been very successful, but in some specialties they have no additional capacity.

There is a need for a thorough assessment of the capacity of the specialty care system for the uninsured and medically underserved and the demands for such services. Are patients going without specialty care and what is the impact on their health and downstream costs to the system?