INTEGRATION OF CLINIC SERVICES TO IMPROVE PUBLIC HEALTH EFFECTIVENESS IN WYANDOTTE COUNTY PUBLIC HEALTH DEPARTMENT

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Kansas State University
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OVERVIEW

- Wyandotte County – County Demographics
- Wyandotte County Health Department
- Upcoming changes in health care systems
- Problem statement
- Strategic Planning
- Interventions
  - Clinic integration
  - Renovations of Clinic Area
- Evaluation of Interventions
  - Client Encounters and Nurse Availability
  - Surveys
- Discussion
- Expectations and Future steps
**Wyandotte County (WYCO) Demographics**

- Most densely populated county in Kansas
- 21.9% living in poverty (Kansas 12.6%)
- 8.4% Unemployment (Kansas 5.2%)
- 24% Uninsured (Kansas 13.1%)
- Large community of refugees (1,000–1,500 refugees/year)

*County Health Rankings, 2013*
DEMOGRAPHICS
CHILDREN POVERTY

Children in Poverty in Wyandotte County, KS
County, State and National Trends

Note: Prior to 2005, children in poverty was based on the Current Population Survey; beginning in 2005, it was based on the American Community Survey.

County Health Rankings, 2013
Facility
- Built in 1972
- Old and outdated clinic areas

Patient Processing
- “Silo” system:
  - Individual, stand-alone services
  - Services typically funded individually
- Funding generally grant supported
- Plays critical role in health of county residents (40,000 client visits/year)
- Improvement needed for public health system
UPCOMING CHANGES IN HEALTH CARE SYSTEMS

- Affordable Care Act (ACA) – January 2014
- Federal funding
  “...the assumption is that with the ACA everyone will have insurance so we won’t need the funding we have now” (KHI, 2012)
- Undocumented individuals? Individuals whose incomes are below 133% of federal poverty level?
- Benefits will cost more than what Americans are paying now for the health insurance
- Challenge: finding health care for newly insured
INSTITUTE OF MEDICINE’S STRATEGIC PLAN

Proposed main principles

- Basic common goal on how to improve each community’s health
- How to involve each community in a plan to emphasize their needs and a way to address them
- Leadership committees
- Sustainability
- Collaborative use of data and analysis

Institute of Medicine, 2013
PROBLEM STATEMENT

- Need for improved resident health
  - County health ranking is low
    - #99 in Kansas out of 102 in health outcomes
    - #102 in Kansas out of 102 in health factors

- Lack of efficiency meeting the needs of the WCHD patients
  - Outdated facilities and processes

- Missed opportunities to provide needed services
  - Lack of comprehensive and complete clinical encounters

- Categorical services
  - Heavily dependant on grant funding sources
Problem Statement Cont.

- Poor health behaviors
  - Highest rates of all reportable Sexually transmitted diseases (STD) in Kansas (Gonorrhea – 1st, and Chlamydia – 2nd)
  - Family planning
    - High teen pregnancy rate
    - Teen birth rate: 81 per 1,000 female teens
    - Lack of education and access to birth control
  - Immunizations
    - Vaccine preventable diseases
      - 2012 Pertussis outbreak in Kansas City
    - Children lacking immunization
      - Only 60% of children at 24 months are fully immunized
STRATEGIC PLANNING PROCESS TO ADDRESS PROBLEM

- Planning Teams
  - Clinic Integration Team
    - Health Department employees
  - Renovation Team
    - Health Department and Unified Government employees and architects

- Planning Activities
  - Best practices
    - Visit other organizations
      - Health Departments
      - Government buildings
      - Private Clinics
  - Brain storming meetings
  - Clinic staff interviews
  - Goal setting
  - Cost analysis
  - Developing completion schedule for integration and renovation
INTERVENTIONS – GOALS

1) Integration of clinic services
   • Increased patient visits
   • Crossed trained clinical and clerical staff
   • Increased encounters per nurse visit
   • Reduced patient wait times
   • Centralize registration process
   • Improved patient and staff satisfaction
   • Time frame to complete 10/1/2012 to 12/31/2012

2) Renovation of medical records and clinic areas
   • Centralize registration process
   • Improved the appearance of clinics
   • Improved patient flow
   • Improved patient and staff satisfaction
   • Better utilization of clinic space
   • Moving to paperless system
   • Time frame to complete 9/1/2012 to 12/31/2012
INTEGRATION

BEFORE

STD

Family Planning

Immunizations

AFTER

STD

Family Planning

Immunizations
Clinic Integration

- Combine Immunizations, STD and Family Planning Clinic areas
  - Cross-trained nurses and clerks
  - More examination rooms
  - Birth control offered in all clinical service areas
  - Pregnancy tests available for all visits
  - Nurses educate patients, counsel, test, partner counseling, etc.
Clinic Integration Cont.

- Immunization Clinic expanded
  - Counseling and administering foreign travel vaccines
  - Cross-trained nurses: Trained to assess, administer treatment and provide teaching for the process of the infections, medications and STD’s.
  - Fluoride treatments
  - Outreach to the community has improved
Clinic Integration Cont.

- Cross-training of nurses
  - Participated in professional training courses
  - All nurses are proficient in all areas
  - More encounters for birth control
  - Provide easier access for the patients
  - Orient the clients
  - Active role in educating at health fairs
Number of Nurses trained for the different services

<table>
<thead>
<tr>
<th>Service</th>
<th>2012</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluoride Treatment</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Blood Draw</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Male Specimen Collection</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>STD</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Child Immunization</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>Adult Immunization</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Birth Control Encounters</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Wart Treatment</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
Clinic Renovations

- Improve appearance of facility
- Modernize the Health Department
- Friendlier environment
- Efficient use of space
  - 3 registration areas reduced to 1
  - 2 waiting rooms reduced to 1
  - 6 examination rooms expanded to 8
  - Medical records area to office space
PICTURES – MAIN ENTRANCE

Before

After
Registration

Before

After
MEDICAL RECORDS

Before

After
WAITING ROOM

Before

After
CLINIC HALLWAYS

Before

After
CONSTRUCTION PROCESS
EVALUATION OF INTERVENTIONS SURVEYS (PATIENT AND EMPLOYEE)

- Before/After integration and renovation of clinics
- English/Spanish

Patients perceptions:
  - Questions – visit, services provided, remodeled areas, etc.

Employees perceptions:
  - Questions: how they feel working at the WCHD, sense of accomplishment with the services they are providing, remodeled clinic areas, integration of the services, etc.
PATIENTS

- Pre-intervention survey
  - May 2012
  - 294 surveys collected
- Post-intervention survey
  - March 2013
  - 251 surveys collected

- Five point Likert scale
  - Very poor, Poor, Fair, Good, Very Good
  - Very Unlikely, Unlikely, Not sure, Likely, Very Likely
  - Strongly Disagree, Disagree, Neither Agree nor Disagree, Agree, Strongly Agree

EMPLOYEES

- Pre-intervention survey
  - October 2012
  - 32 surveys collected
- Post-intervention survey
  - March 2013
  - 30 surveys collected
PATIENT SURVEY

Ease of Registration

P-value < 0.01
**Patient Survey**

### Length of time in waiting room

<table>
<thead>
<tr>
<th>Category</th>
<th>PRE</th>
<th>POST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very poor</td>
<td>14.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Poor</td>
<td>15.0%</td>
<td>0.8%</td>
</tr>
<tr>
<td>Fair</td>
<td>27.2%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Good</td>
<td>29.2%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Very good</td>
<td>14.6%</td>
<td>54.1%</td>
</tr>
</tbody>
</table>

P-value < 0.01
PATIENT SURVEY

Ease of going from check-in through check-out

P-value < 0.01
PATIENT SURVEY

Overall satisfaction of visit

0% 10% 20% 30% 40% 50% 60% 70%
Very poor Poor Fair Good Very good

3.1% 13.9% 17.7% 33.7% 58.5%

PRE POST

P-value < 0.01
Patient Survey

Needs were met to your expectations

- Very poor: 2.4%, 0.8%
- Poor: 8.2%, 0.4%
- Fair: 20.1%, 3.7%
- Good: 35.7%, 34.2%
- Very good: 33.7%, 60.9%

P-value < 0.01
Length of time in waiting room - Good/Very Good

Ease of going from check-in through check-out - Good/Very Good
### Length of time in waiting room - Good/Very Good

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 and younger</td>
<td>38.0%</td>
<td>82.0%</td>
</tr>
<tr>
<td>26 and older</td>
<td>49.0%</td>
<td>88.2%</td>
</tr>
</tbody>
</table>

### Ease of going from check-in through check-out - Good/Very Good

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 and younger</td>
<td>48.1%</td>
<td>86.8%</td>
</tr>
<tr>
<td>26 and older</td>
<td>63.1%</td>
<td>92.6%</td>
</tr>
</tbody>
</table>
When a patient/client is dissatisfied, I can usually correct the problem to their satisfaction

P-value > 0.05
EMPLOYEE SURVEY

The current health department system for processing patients/clients is fast and efficient

P-value < 0.01
**EMPLOYEE SURVEY**

The physical appearance of the health department clinics is pleasant and clean.

![Bar chart showing responses](chart.png)

- **Strongly Disagree**: 43.7%
- **Disagree**: 31.3%
- **Neither Agree nor Disagree**: 23.3%
- **Agree**: 18.7%
- **Strongly Agree**: 6.3%

P-value < 0.01
Employee Survey

Considering everything, I am satisfied with my job

P-value > 0.05
I have a good understanding of the different services offered by the health department clinics

P-value < 0.05
## Client Flow Improved

<table>
<thead>
<tr>
<th>Service Provided</th>
<th>January 2012</th>
<th>January 2013</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Planning</td>
<td>497</td>
<td>590</td>
<td>15.8 %</td>
</tr>
<tr>
<td>General Clinic</td>
<td>3</td>
<td>17</td>
<td>82.3 %</td>
</tr>
<tr>
<td>Immunizations – Adults</td>
<td>84</td>
<td>135</td>
<td>37.7 %</td>
</tr>
<tr>
<td>Immunizations General Clinic – Children</td>
<td>271</td>
<td>295</td>
<td>8.1 %</td>
</tr>
<tr>
<td>Immunizations in WIC</td>
<td>180</td>
<td>410</td>
<td>56.1 %</td>
</tr>
<tr>
<td>STD</td>
<td>202</td>
<td>261</td>
<td>22.6 %</td>
</tr>
<tr>
<td>Teen pregnancy prevention</td>
<td>27</td>
<td>35</td>
<td>22.9%</td>
</tr>
<tr>
<td><strong>Total number of new clients</strong></td>
<td><strong>328</strong></td>
<td><strong>463</strong></td>
<td><strong>29.2 %</strong></td>
</tr>
</tbody>
</table>
Discussio

- More services provided
- More clients visits
- Increased efficiency of services
- Opens up the possibility for the Health Department to become the “medical home” for its patients
- Integrated protocols for all the clinical services
- Competent staff
- Increased patient satisfaction
- Electronic patient records (paperless)
EXPECTATIONS

- WCHD will be recognized by the community private health care providers, which will refer their patients for specific clinical services offered in the Health Department’s clinics.

- Public health workforce will be more highly skilled – decrease in unwanted public health-related issues.

- With ACA: it is hoped that the public health clinics will have a secure and relevant role in the context of health care reform.
FUTURE STEPS

- Funding?

- Need to market the clinics services to target other health care organizations, communities and populations

- Additional activities

- Convince Wyandotte County’s population in general that the Health Department is a high quality and accessible place for everyone
Future of Health Care

- Primary care physicians' shortage
- "...the total number of office visits to primary care physicians is projected to increase from 462 million in 2008 to 565 million in 2025, which will require more than 52,000 additional primary care physicians" (Peterson et al. 2012)
- Will be a bigger issue with the implementation of the ACA
- Remedy: primary care physicians use of the resources available through current public health services
FUTURE HEALTH SERVICES IN WCHD

- Wellness
  - Nutrition and Fitness

- Dental services

- Delivering services for pregnant women
CONCLUSION

- Integration of clinic areas was perceived positively by both employees and patients
- The WCHD has positioned itself for potential changes in health care system
- The health department’s renovation has put the facility more in line with other peer organizations
- Renovations have made the WCHD more inviting and functional for patients
- The integration is an ongoing process
ACKNOWLEDGEMENTS

- Dr. Larry Franken
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- Barta Stevenson
REFERENCES


QUESTIONS?