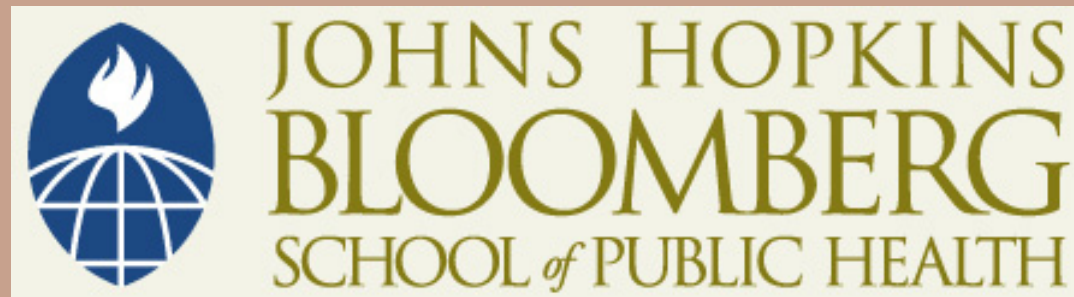


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Section A: Case Study: Integration of CPT Codes into the Breast and Cervical Cancer Project (BCCP) System at the Cuyahoga County Board of Health

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Cuyahoga County Board of Health (CCBH)

Cuyahoga County Board of Health (CCBH)

- Local health department
- Serves approximately 845,000 residents in Cuyahoga County, Ohio, excluding Shaker Heights and the City of Cleveland
- The Breast and Cervical Cancer Project (BCCP) serves women and men in Cuyahoga County and six surrounding counties



Breast and Cervical Cancer Project (BCCP)

- Funding obtained through the Ohio Department of Health in 1994
- Provides a screening and early detection program for both symptomatic and asymptomatic women
- **Objective:** provide education, screening, re-screening, diagnostics, and case management related to breast and cervical cancer

BCCP Beginnings

- Records stored on paper
- Evolved into a Microsoft Access database
- Program outgrew MS Access, and funder requested data beyond the scope of MS Access
- The CCBH informatics staff evaluated the program request with content experts
- After reviewing other software options, the decision was made to build on/expand the current existing custom-built data collection application to include BCCP program

BCCP Eligibility

- Must live in a household with an income less than 200% of the poverty level
- Must be uninsured
- Must be 40 years of age or older to receive Pap tests, pelvic exams, and clinical breast exams
- Must be 50 years of age or older to receive mammograms

BCCP Services

- Mammograms, Pap tests, office visits, clinical breast exams, surgical consultations, colposcopies, breast ultrasounds, biopsies, and other diagnostic procedures
- The clinical services are provided through a network of more than 100 Ohio primary care physicians, nurse practitioners, gynecologists, surgeons, mammography facilities, radiologists, technologists/technicians, and cytologists

BCCP Treatment Services

- On July 1, 2002, Ohio Medicaid expanded eligibility to BCCP clients who require treatment for breast or cervical cancer (or pre-cancerous conditions)

- This expansion benefits the following:
 - BCCP clients who were diagnosed with cancer in the past through the program and are still undergoing treatment
 - Existing BCCP clients who may be diagnosed in the future
 - Any new clients that enroll in the project

CCBH Enterprise

- Custom-built intranet application
- Microsoft .NET frontend with SQL Server backend
- Supports many functions and programs within CCBH

BCCP on the CCBH Enterprise

- The BCCP is a case management application on the CCBH Enterprise
- Web pages allow project staff to easily schedule appointments and screenings for breast and cervical cancer services
- This complete system handles all aspects of case management, with controls in place to track billing records, laboratory results, and client notifications

BCCP on the CCBH Enterprise

- Onscreen queues are provided to support routine callbacks and flag cases which require additional care
- Several dashboards provide insight into the data which is used to guide the program
 - This includes CPT codes
- This software allowed the project to earn satisfactory ratings from the Ohio Department of Health and Susan G. Komen for the Cure®, the project funders

Integration of CPT Codes into the BCCP System

- Provides ability to track appointments, bills, and results based on common terminology
- Codes have to be related to all different aspects of the program

Relational Database Diagram

BCCP Clients
PK - Client ID

Client
Appointments
PK Appt ID
FK Client ID

Results
PK Result ID
FK Appt ID
FK Client ID
FK CPT ID

Bills
PK Result ID
FK Appt ID
FK Client ID
FK CPT ID

CPT Code
Table
PK CPT ID

- CPT code ID (PK) is stored with the Appointment Result record and with the Appointment Billing record

- Because the BCCP follows the AMA-generated CPT code standard, communication between the program, the service providers, and third-party payers can be seamless

Reports Based on CPT Codes

- Data in system can now be reported by CPT code and ...
 - Provider
 - County
 - ▶ Provider
 - ▶ Client
 - Client demographics
 - ▶ Age
 - ▶ Race
 - Bills

Examples of Data Reports

| BCCP CLIENT SUMMARIES | | |
|--|---|--|
| <input type="text" value="1/1/2011"/> <input type="text" value="12/31/2011"/> <input type="button" value="Go"/> | County/CityCodes <input type="text" value="CUYAHOGA"/> <input type="text" value="[Select City Code]"/> | <input type="radio"/> BCCP <input type="radio"/> Komen <input checked="" type="radio"/> Both |
| 4325 Total Services Performed on 1451 Clients Adjusted expenditure of \$233,679.54 | 0 Clients have Appts in the system with no Associated Billing records, They are assumed to be BCCP Clients | |
| 161 have been identified as a high risk for breast cancer. 15 have breast Implants. 377 have been identified as a high risk for cervical cancer. | 257 are smokers. 114 have had a hysterectomy. | 890 are 'New' Clients. 561 are 'rescreen' Clients. |
| CLIENTS SERVED BY RACE AND AGE GROUP | CLIENT SERVED BY ETHNICITY AND AGE GROUP | CLIENTS SERVED BY AGE GROUP |

Examples of Data Reports

| SERVICES PERFORMED AND COST BY AGE GROUP | | | | |
|--|-------------------------------|----------|--------------|---|
| CPT code | Clients Receiving the Service | Total | Total Unpaid | Age Group (Clients Receiving the Service) |
| 00400 - G | 3 | 1089.87 | 0 | 40-49 (1) 50+ (2) |
| 10021 - G | 1 | 140.50 | 0 | 40-49 (1) |
| 10022 - G | 1 | 134.22 | 134.22 | 50+ (1) |
| 10160 - G | 3 | 156.03 | 0 | 40-49 (1) 50+ (2) |
| 19100 - G | 27 | 3712.62 | 3572.08 | 40-49 (5) 50+ (22) |
| 19102 - G | 5 | 1045.30 | 0 | 40-49 (3) 50+ (2) |
| 19103 - G | 30 | 16039.20 | 0 | 40-49 (13) 50+ (17) |
| 19120 - G | 6 | 2778.30 | 430.65 | 40-49 (5) 50+ (1) |
| 19125 - G | 9 | 4695.57 | 0 | 40-49 (4) 50+ (5) |
| 19126 - G | 2 | 327.50 | 0 | 40-49 (1) 50+ (1) |

| | | | | |
|-----------|-----|----------|---------|-------------------------|
| 99201 - G | 76 | 3046.75 | 2563.54 | 40-49 (23) 50+ (53) |
| 99202 - G | 58 | 4066.38 | 140.22 | 40-49 (17) 50+ (41) |
| 99203 - G | 56 | 5703.12 | 95.13 | 40-49 (22) 50+ (34) |
| 99204 - G | 108 | 12306.63 | 3463.56 | 40-49 (31) 50+ (77) |
| 99205 - G | 35 | 5546.31 | 0 | 40-49 (11) 50+ (24) |
| 99211 - G | 50 | 929.50 | 622.18 | 40-49 (12) 50+ (38) |
| 99212 - G | 178 | 7240.36 | 1893.56 | 40-49 (59) 50+ (119) |
| 99213 - G | 233 | 15883.99 | 1150.63 | 40-49 (84) 50+ (149) |
| 99214 - G | 86 | 5843.71 | 868.85 | 40-49 (21) 50+ (65) |
| 99215 - G | 35 | 2387.35 | 204.63 | 40-49 (4) 50+ (31) |

Examples of Data Reports

| SERVICES PERFORMED AND COST BY AGE GROUP | | | | |
|--|-------------------------------|----------|--------------|---|
| CPT code | Clients Receiving the Service | Total | Total Unpaid | Age Group (Clients Receiving the Service) |
| | | | | 40-49 (1) |
| 00400 - G | 3 | 1089.87 | 0 | 50+ (2) |
| 10021 - G | 1 | 140.50 | 0 | 40-49 (1) |
| 10022 - G | 1 | 134.22 | 134.22 | 50+ (1) |
| 10160 - G | 3 | 156.03 | 0 | 40-49 (1) |
| | | | | 50+ (2) |
| 19100 - G | 27 | 3712.62 | 3572.08 | 40-49 (5) |
| | | | | 50+ (22) |
| 19102 - G | 5 | 1045.30 | 0 | 40-49 (3) |
| | | | | 50+ (2) |
| 19103 - G | 30 | 16039.20 | 0 | 40-49 (13) |
| | | | | 50+ (17) |
| 19120 - G | 6 | 2778.30 | 430.65 | 40-49 (5) |
| | | | | 50+ (1) |
| 19125 - G | 9 | 4695.57 | 0 | 40-49 (4) |
| | | | | 50+ (5) |
| 19126 - G | 2 | 327.50 | 0 | 40-49 (1) |
| | | | | 50+ (1) |

| | | | | |
|-----------|-----|----------|---------|------------|
| 99201 - G | 76 | 3046.75 | 2563.54 | 40-49 (23) |
| | | | | 50+ (53) |
| 99202 - G | 58 | 4066.38 | 140.22 | 40-49 (17) |
| | | | | 50+ (41) |
| 99203 - G | 56 | 5703.12 | 95.13 | 40-49 (22) |
| | | | | 50+ (34) |
| 99204 - G | 108 | 12306.63 | 3463.56 | 40-49 (31) |
| | | | | 50+ (77) |
| 99205 - G | 35 | 5546.31 | 0 | 40-49 (11) |
| | | | | 50+ (24) |
| 99211 - G | 50 | 929.50 | 622.18 | 40-49 (12) |
| | | | | 50+ (38) |
| 99212 - G | 178 | 7240.36 | 1893.56 | 40-49 (59) |
| | | | | 50+ (119) |
| 99213 - G | 233 | 15883.99 | 1150.63 | 40-49 (84) |
| | | | | 50+ (149) |
| 99214 - G | 86 | 5843.71 | 868.85 | 40-49 (21) |
| | | | | 50+ (65) |
| 99215 - G | 35 | 2387.35 | 204.63 | 40-49 (4) |
| | | | | 50+ (31) |

Examples of Data Reports

| Appointment Start Date <input type="text" value="1/1/2011"/> | | Appointment End Date <input type="text" value="12/31/2011"/> | | <input type="button" value="Show Data"/> |
|--|------------------------|--|--|--|
| 3336 Clients have had an appointment scheduled during the time period entered, as requested this data total has no filter on the TPA | | <input type="radio"/> Estimated <input type="radio"/> Confirmed <input type="radio"/> Reconciliation <input checked="" type="radio"/> All (3 valid) <input type="radio"/> Claim Returned <input type="radio"/> Claim Not Received | | <input type="radio"/> Komen <input type="radio"/> BCCP <input checked="" type="radio"/> Both |
| CPT Code | Times Selected (11750) | Total Amount (\$680,371.80) | CPT Description | |
| 00400 - G | 9 | \$3,341.63 | Anesthesia | |
| 10021 - G | 5 | \$702.50 | fine needle aspiration w/o imaging guidance | |
| 10160 - G | 5 | \$260.05 | Puncture aspiration of abcess hemtoma or cyst | |
| 19000 - G | 6 | \$639.60 | puncture aspiration of the breast | |
| 19001 - G | 2 | \$52.96 | each additional cyst | |
| 19100 - G | 55 | \$7,729.70 | biopsy of breast; needle core | |
| 19101 - G | 3 | \$964.71 | biopsy of breast; incisional | |
| 19102 - G | 7 | \$1,463.42 | biopsy; percutaneous needle core w/guidance | |
| 19103 - G | 63 | \$33,682.32 | biopsy of breast; percutaneous automated vacuum | |
| 19110 - G | 1 | \$456.16 | Nipple exploration | |
| 19120 - G | 15 | \$7,042.95 | excision of cyst, fibroadenoma or tumor | |
| 19125 - G | 22 | \$11,478.06 | excision of breast lesion w/preop radiological mar | |
| 19126 - G | 5 | \$818.75 | each additional lesion | |
| 19290 - G | 13 | \$2,026.83 | preop placement of needle wire | |
| 19291 - G | 3 | \$198.81 | each additional lesion | |
| 19295 - G | 65 | \$5,642.21 | image guided placment metallic clip | |

- This report includes estimated bills and clients in all counties served

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