NBDPN State Data Collection Survey

This survey was developed by the SGSC Technical Tools Workgroup (chaired by Linda Jackson). Responses were collected from NBDPN state contacts in April of 2007.

Highlights

Almost a quarter of passive programs employ abstractors.

Most programs have abstractors code defects and provide QA.

Passive programs use abstractors to make case determination decisions.

Active and hybrid programs do not do that as much.

Paper medical records still dominate, but electronic records are also very common. Remote access to medical records not common at this point, but active programs are more likely to have such access.

Computers used by most programs (62%) to transfer information from the medical record. Active programs more likely to abstract on paper only.

Regarding needed computer skills:

There is a lot of variability among programs
Typing proficiency is valued
10-key is not particularly valued
Proficiency with database software is valued

Regarding needed knowledge, skills, and abilities:

Credentials are not important.

Programs with abstractors universally valued the ability to find what's needed in a medical record.

All items (except need for credentials) rated as important by programs with abstractors.

Knowledge of program privacy standards and HIPAA important to programs w/o abstractors relative to the other listed KSAs.

Common theme among comments: importance of ongoing training, desire for training resources.

Please contact Linda Jackson (JacksonLindaS@uams.edu) or Brad McDowell (bradley-mcdowell@uiowa.edu) with any questions about this survey.

| Program Case Ascertainment Method: | | |
|--------------------------------------------|---------------------|-------------------|
| answer options | Response Percent | Response Count |
| Active | 38.64% | 17 |
| Passive | 38.64% | 17 |
| Hybrid (combination of active and passive) | 22.73% | 10 |
| answered question | | 44 |
| s | kipped question | 0 |

Almost a quarter of passive program employ abstractors.

| Does your program employ abstractors who visit medical facilities (either remotely or on-site) to examine medical records? | | | |
|----------------------------------------------------------------------------------------------------------------------------|-----------------|----|--|
| Response Response Percent Count | | | |
| Yes | 65.91% | 29 | |
| No | 34.09% | 15 | |
| answered question | | 44 | |
| s | kipped question | 0 | |

ACTIVE ONLY

| answer options | Response Percent | Response Count |
|-------------------|---------------------|-------------------|
| Yes | 100.00% | 17 |
| No | 0.00% | 0 |
| answered question | | 17 |
| skipped question | | 0 |

PASSIVE ONLY

| answer options | Response Percent | Response Count |
|-------------------|---------------------|-------------------|
| Yes | 23.53% | 4 |
| No | 76.47% | 13 |
| answered question | | 17 |
| skipped question | | 0 |

| answer options | Response Percent | Response Count |
|-------------------|---------------------|-------------------|
| Yes | 80.00% | 8 |
| No | 20.00% | 2 |
| answered question | | 10 |
| s | kipped question | 0 |

Most programs have abstractors code defects and provide QA.

Passive programs use abstractors to make case determination decisions.

Active and hybrid do not do that as much.

| Please check all birth defect program functions performed by your | | |
|-------------------------------------------------------------------|------------------|----------|
| abstractors: | _ | |
| | Response | Response |
| answer options | Percent | Count |
| Coding | 82.76% | 24 |
| Quality assurance | 72.41% | 21 |
| Final case determination decisions | 51.72% | 15 |
| Management | 17.24% | 5 |
| Other (please list function) | 27.59% | 8 |
| answered question | | |
| | skipped question | 15 |

| Other (please list function) |
|--------------------------------------------------------------------------------------|
| surveillance operations |
| case finding |
| review of specific chart information in FASD cases |
| Liaison to hosptials, data entry & abstration |
| Data Collection & initial case determination decisions that are verified by clinical |
| casefinding, medical record review, abstraction |
| ascertainment |
| abstracting; partnership development with hospitals and local perinatal systems; |

ACTIVE ONLY

| | Response | Response |
|------------------------------------|-----------------|----------|
| answer options | Percent | Count |
| Coding | 88.24% | 15 |
| Quality assurance | 64.71% | 11 |
| Final case determination decisions | 47.06% | 8 |
| Management | 23.53% | 4 |
| Other (please list function) | 23.53% | 4 |
| answered question | | 17 |
| s | kipped question | 0 |

PASSIVE ONLY

| | Response | Response |
|------------------------------------|-----------------|----------|
| answer options | Percent | Count |
| Coding | 75.00% | 3 |
| Quality assurance | 100.00% | 4 |
| Final case determination decisions | 75.00% | 3 |
| Management | 25.00% | 1 |
| Other (please list function) | 50.00% | 2 |
| answered question | | 4 |
| s | kipped question | 13 |

| answer options | Response Percent | Response Count |
|------------------------------------|---------------------|-------------------|
| Coding | 75.00% | 6 |
| Quality assurance | 75.00% | 6 |
| Final case determination decisions | 50.00% | 4 |
| Management | 0.00% | 0 |
| Other (please list function) | 25.00% | 2 |
| answered question | | 8 |
| | skipped question | 2 |

Paper medical records still dominate, but electronic records are also very common. Remote access to medical records not common at this point, but active programs are more likely to have such access.

| Medical record | data review method | is (Please check all that apply): |
|----------------|--------------------|-----------------------------------|
|----------------|--------------------|-----------------------------------|

| answer options | Response Percent | Response Count |
|----------------------------------------------------------|---------------------|-------------------|
| Review of paper medical records | 100.00% | 29 |
| Review of electronic medical records at medical facility | 86.21% | 25 |
| Remote access to medical records | 31.03% | 9 |
| Other (please specify) | 6.90% | 2 |
| answered question | | 29 |
| S | kipped question | 15 |

electronc list of case reports with literal diagnosis.
microfilm/microfiche

ACTIVE ONLY

| answer options | Response Percent | Response Count |
|----------------------------------------------------------|---------------------|-------------------|
| Review of paper medical records | 100.00% | 17 |
| Review of electronic medical records at medical facility | 94.12% | 16 |
| Remote access to medical records | 47.06% | 8 |
| Other (please specify) | 5.88% | 1 |
| an | swered question | 17 |
| s | kipped question | 0 |

PASSIVE ONLY

| answer options | Response Percent | Response Count |
|----------------------------------------------------------|---------------------|-------------------|
| Review of paper medical records | 100.00% | 4 |
| Review of electronic medical records at medical facility | 75.00% | 3 |
| Remote access to medical records | 25.00% | 1 |
| Other (please specify) | 25.00% | 1 |
| ar | swered question | 4 |
| | skipped question | 13 |

| | Response | Response |
|-----------------------------------------|-----------------|----------|
| answer options | Percent | Count |
| Review of paper medical records | 100.00% | 8 |
| Review of electronic medical records at | 75.00% | 6 |
| medical facility | 73.0070 | O |
| Remote access to medical records | 0.00% | 0 |
| Other (please specify) | 0.00% | 0 |
| ans | swered question | 8 |
| s | kipped question | 2 |

| Electronic medical record review: | | | | | |
|---------------------------------------------------------------------------------------|------|------|------|-----------------|-------------------|
| answer options | None | Some | Most | Not applicable | Response Count |
| Hospitals in surveillance area that use electronic (i.e., not paper) medical records. | 3 | 23 | 3 | 0 | 29 |
| answered question | | | | | |
| | | | S | kipped question | 15 |

ACTIVE ONLY

| answer options | None | Some | Most | Not applicable | Response Count |
|---------------------------------------------------------------------------------------|------------------|------|------|----------------|-------------------|
| Hospitals in surveillance area that use electronic (i.e., not paper) medical records. | 1 | 15 | 1 | 0 | 17 |
| answered question | | | | | |
| | skipped question | | | | |

PASSIVE ONLY

| answer options | None | Some | Most | Not applicable | Response Count |
|---------------------------------------------------------------------------------------|------|------|------|----------------|-------------------|
| Hospitals in surveillance area that use electronic (i.e., not paper) medical records. | 1 | 3 | 0 | 0 | 4 |
| answered question | | | | | |
| skipped question | | | | | 13 |

| answer options | None | Some | Most | Not applicable | Response Count | |
|---------------------------------------------------------------------------------------|------|------|------|----------------|-------------------|--|
| Hospitals in surveillance area that use electronic (i.e., not paper) medical records. | 1 | 5 | 2 | 0 | 8 | |
| answered question | | | | | | |
| skipped question | | | | | 2 | |

| Remote access medical record review: | | | | | |
|-----------------------------------------------------------------------------------------------|------|------|------|-----------------|-------------------|
| answer options | None | Some | Most | Not applicable | Response Count |
| Hospitals in surveillance area that allow remote access/viewing of electronic medical records | 16 | 9 | 0 | 3 | 28 |
| answered question | | | | 28 | |
| | | | S | kipped question | 16 |

ACTIVE ONLY

| answer options | None | Some | Most | Not applicable | Response Count |
|-----------------------------------------------------------------------------------------------|------|------|------|----------------|-------------------|
| Hospitals in surveillance area that allow remote access/viewing of electronic medical records | 6 | 8 | 0 | 2 | 16 |
| answered question | | | | | |
| skipped question | | | | | 1 |

PASSIVE ONLY

| answer options | None | Some | Most | Not applicable | Response Count |
|-----------------------------------------------------------------------------------------------|------|------|------|----------------|-------------------|
| Hospitals in surveillance area that allow remote access/viewing of electronic medical records | 3 | 1 | 0 | 0 | 4 |
| answered question | | | | | |
| skipped question | | | | | 13 |

| answer options | None | Some | Most | Not applicable | Response Count |
|-----------------------------------------------------------------------------------------------|------|------|------|----------------|-------------------|
| Hospitals in surveillance area that allow remote access/viewing of electronic medical records | 7 | 0 | 0 | 1 | 8 |
| answered question | | | | | |
| skipped question | | | | | 2 |

Computers used by most programs (62%) to transfer information from the medical record.

Active programs more likely to abstract on paper only.

| Is information abstracted from medical records entered on paper or directly into a computer? | | | | | | |
|----------------------------------------------------------------------------------------------|--------|----|--|--|--|--|
| Response Response answer options Percent Count | | | | | | |
| Paper | 37.93% | 11 | | | | |
| Computer | 34.48% | 10 | | | | |
| Both | 27.59% | 8 | | | | |
| answered question | | | | | | |
| skipped question | | | | | | |

ACTIVE ONLY

| answer options | Response Percent | Response Count |
|------------------|---------------------|-------------------|
| Paper | 52.94% | 9 |
| Computer | 29.41% | 5 |
| Both | 17.65% | 3 |
| ans | 17 | |
| skipped question | | |

PASSIVE ONLY

| | Response | Response | |
|----------------|------------------|----------|--|
| answer options | Percent | Count | |
| Paper | 25.00% | 1 | |
| Computer | 50.00% | 2 | |
| Both | 25.00% | 1 | |
| ans | 4 | | |
| s | skipped question | | |

| answer options | Response Percent | Response Count | |
|------------------|---------------------|-------------------|--|
| Paper | 12.50% | 1 | |
| Computer | 37.50% | 3 | |
| Both | 50.00% | 4 | |
| ans | 8 | | |
| skipped question | | | |

There is a lot of variability among programs
Typing proficiency is valued
10-key is not particularly valued
Proficiency with database software is valued

Please rate the importance of the following computer skills and/or abilities to the work of your abstractors or data review staff.

| answer options | Not important | | | | Very important | Rating Average | Response Count |
|------------------------------------------------|---------------|----|----|----|----------------|----------------|-------------------|
| Proficiency in typing | 8 | 5 | 5 | 11 | 13 | 3.38 | 42 |
| Proficiency in ten-key | 17 | 6 | 8 | 5 | 4 | 2.33 | 40 |
| Proficiency in spreadsheet software | 8 | 11 | 5 | 11 | 7 | 2.95 | 42 |
| Proficiency in database software | 6 | 6 | 9 | 12 | 9 | 3.29 | 42 |
| Proficiency in using the internet for research | 8 | 5 | 16 | 8 | 5 | 2.93 | 42 |
| answered question | | | | | | | 42 |
| skipped question | | | | | | 2 | |

PROGRAM HAS ABSTRACTORS

| | | | | | | | Response |
|------------------------------------------------|---------------|---|----|---|----------------|----------------|----------|
| answer options | Not important | | | | Very important | Rating Average | Count |
| Proficiency in typing | 4 | 4 | 3 | 8 | 10 | 3.55 | 29 |
| Proficiency in ten-key | 12 | 5 | 5 | 3 | 3 | 2.29 | 28 |
| Proficiency in spreadsheet software | 6 | 9 | 3 | 7 | 4 | 2.79 | 29 |
| Proficiency in database software | 4 | 6 | 6 | 8 | 5 | 3.14 | 29 |
| Proficiency in using the internet for research | 6 | 5 | 10 | 5 | 3 | 2.79 | 29 |
| answered question | | | | | | 29 | |
| skipped question | | | | | | 0 | |

PROGRAM DOES NOT HAVE ABSTRACTORS

| | | | | | | | Response |
|------------------------------------------------|---------------|---|---|---|----------------|----------------|----------|
| answer options | Not important | | | | Very important | Rating Average | Count |
| Proficiency in typing | 4 | 1 | 2 | 3 | 3 | 3 | 13 |
| Proficiency in ten-key | 5 | 1 | 3 | 2 | 1 | 2.42 | 12 |
| Proficiency in spreadsheet software | 2 | 2 | 2 | 4 | 3 | 3.31 | 13 |
| Proficiency in database software | 2 | 0 | 3 | 4 | 4 | 3.62 | 13 |
| Proficiency in using the internet for research | 2 | 0 | 6 | 3 | 2 | 3.23 | 13 |
| answered question | | | | | | 13 | |
| skipped question | | | | | | 2 | |

Credentials not important.

Programs with abstractors universally valued the ability to find what's needed in a medical record.

All items (except need for credentials) rated as important by programs with abstractors.

Knowledge of program privacy standards and HIPAA important to programs w/o abstractors relative to the other listed KSAs.

Please rate the importance of the following knowledge, skills, and abilities to the work of your abstractors or data review staff.

| answer options | Not important | | | | Very important | Rating Average | Response Count |
|-----------------------------------------------------------------------------|---------------|---|----|----|----------------|-----------------|-------------------|
| Medical/Clinical experience | 3 | 2 | 8 | 14 | 16 | 3.88 | 43 |
| Knowledge of anatomy/physiology | 2 | 0 | 7 | 12 | 21 | 4.19 | 42 |
| Knowledge of medical terminology | 1 | 1 | 4 | 7 | 30 | 4.49 | 43 |
| Ability to understand and find what's needed in a medical record | 3 | 1 | 0 | 4 | 35 | 4.56 | 43 |
| Experience with medical record abstraction | 4 | 3 | 8 | 11 | 17 | 3.79 | 43 |
| Knowledge of medical coding classification systems (e.g., ICD-9, BPA, etc.) | 1 | 1 | 7 | 14 | 20 | 4.19 | 43 |
| Credentials requirement (RHIT,RHIA,CCS,CPC, CTR) | 8 | 9 | 14 | 9 | 3 | 2.77 | 43 |
| Knowledge of surveillance program confidentiality/privacy standards | 1 | 0 | 3 | 5 | 34 | 4.65 | 43 |
| Federal HIPAA knowledge | 1 | 1 | 6 | 16 | 19 | 4.19 | 43 |
| answered question | | | | | | swered question | 43 |
| skipped question | | | | | | 1 | |

PROGRAM HAS ABSTRACTORS

| | | | | | | | Response |
|-----------------------------------------------------------------------------|---------------|---|----|----|----------------|-----------------|----------|
| answer options | Not important | | | | Very important | Rating Average | Count |
| Medical/Clinical experience | 2 | 1 | 2 | 11 | 13 | 4.1 | 29 |
| Knowledge of anatomy/physiology | 1 | 0 | 1 | 8 | 19 | 4.52 | 29 |
| Knowledge of medical terminology | 0 | 0 | 1 | 2 | 26 | 4.86 | 29 |
| Ability to understand and find what's needed in a medical record | 0 | 0 | 0 | 0 | 29 | 5 | 29 |
| Experience with medical record abstraction | 0 | 1 | 5 | 8 | 15 | 4.28 | 29 |
| Knowledge of medical coding classification systems (e.g., ICD-9, BPA, etc.) | 0 | 0 | 6 | 7 | 16 | 4.34 | 29 |
| Credentials requirement (RHIT,RHIA,CCS,CPC, CTR) | 5 | 6 | 11 | 6 | 1 | 2.72 | 29 |
| Knowledge of surveillance program confidentiality/privacy standards | 0 | 0 | 2 | 2 | 25 | 4.79 | 29 |
| Federal HIPAA knowledge | 0 | 1 | 5 | 11 | 12 | 4.17 | 29 |
| answered question | | | | | | swered question | 29 |
| skipped question | | | | | | 0 | |

PROGRAM DOES NOT HAVE ABSTRACTORS

| answer options | Not important | | | | Very important | Rating Average | Response Count |
|-----------------------------------------------------------------------------|---------------|---|---|---|----------------|-----------------|-------------------|
| Medical/Clinical experience | 1 | 1 | 6 | 3 | 3 | 3.43 | 14 |
| Knowledge of anatomy/physiology | 1 | 0 | 6 | 4 | 2 | 3.46 | 13 |
| Knowledge of medical terminology | 1 | 1 | 3 | 5 | 4 | 3.71 | 14 |
| Ability to understand and find what's needed in a medical record | 3 | 1 | 0 | 4 | 6 | 3.64 | 14 |
| Experience with medical record abstraction | 4 | 2 | 3 | 3 | 2 | 2.79 | 14 |
| Knowledge of medical coding classification systems (e.g., ICD-9, BPA, etc.) | 1 | 1 | 1 | 7 | 4 | 3.86 | 14 |
| Credentials requirement (RHIT,RHIA,CCS,CPC, CTR) | 3 | 3 | 3 | 3 | 2 | 2.86 | 14 |
| Knowledge of surveillance program confidentiality/privacy standards | 1 | 0 | 1 | 3 | 9 | 4.36 | 14 |
| Federal HIPAA knowledge | 1 | 0 | 1 | 5 | 7 | 4.21 | 14 |
| | | | | | an | swered question | 14 |
| | | | | | S | kipped question | 1 |

Common theme: importance of ongoing training, desire for training resources.

| Please describe any other thoughts or concerns you may have regarding the training needs of your abstractors or data review staff. | | | | |
|------------------------------------------------------------------------------------------------------------------------------------|----|--|--|--|
| answer options Response Count | | | | |
| | 21 | | | |
| answered question | 21 | | | |
| skipped question | 23 | | | |

| Respondents | |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Procedures, tests/results, etc. indicating defect and severity. Birth defect epidemiology including "syndromes," complications and standard medical issues and assessments. Possible Birth Defect CME credits. |
| 2 | Breakouts and workshops on coding at the CMR annual meeting is very helpful |

| 3 | Abstractors would like to have a comprehensive list/training on medical procedures used to diagnose all different types of birth defects. Pictures/a video would be ideal so that they can see what the procedures do and how they are used. |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Electronic medical records pose challenges. IT staff are becoming more important than those working in Med Rec Dept. Often, ability to retrieve information necessary for research-surveillance cannot be accomplished by those in Med Rec. i.e. Skills needed to pull a chart are vastly different than skills needed in performing a data query. Med Rec Dept are not prepared for EMR, nor are the HIM professionals who have been trained on the hard copy record. |

| - | 1 |
|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | I feel that nationally consistent training tools/program would be of great benefit to all birth defect surveillance systems in the Us. |
| 6 | It's important that they receive ongoing feedback regarding coding/abstraction once case has been verified |
| 7 | Suggestions: 1) At the state level, pay for/encourage staff to participate in local training sessions (eg in XX, state sponsored birth certificate training). 2) At the national level, continue addressing the idea of establishing National Birth Defects Abstractor Certification Program (on-line train-ing program, & testing exams) good nationwide. |

| 8 | |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0 | The XXX does not employ abstractors to examine medical records. |
| 9 | Training ineeds to be ongoing. Even experienced abstractors need continuing education and quality control to ensure consistent abstraction. Inservices play an important role for our abstractors and each abstractor is responsible for planning one in-servive per year. |
| 10 | It would be helpful to have sample medical charts, echo reports, etc., with a key as to what birth defects should be identified that could be used as a training or quality assessment tool. |

| 11 | Program visitors do not actually abstract medical records. They do quality assurance checks to ensure accuracy of data entered. |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | Independent, self starter with ability to track travel time, distance and fees associated with travel (parking, tolls). Ability to distinguish between study criteria and impliment changes to study criteria. Good communication skills. |

| 13 | |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Case ascertainment requires clinical oversight or a clinical, e.g., a physician, nurse, or public health professional. Administrative staff should include an individual proficient in database design, development, testing, lauching, mangement, and maintenance. |
| 14 | Participation in different meetings/workshops/trainings related to different aspects of Birth Dfects organized by different organizations/agencies from time to time |
| 15 | We have not been comfortable hiring people with less than a Batchelor's degree. |
| 16 | - helpful to learn how the information we gather is used (e.g.: what a case looks like once it's entered in the database) |

| 17 | |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | We have no abstractors at this time. |
| 18 | Ability to work effectively with medical records staff. Ability to work independently and manage own schedule. Effective writing skills. Abstractors are RNs - little training is needed. |
| 19 | We do not have abstractors, nor do we have a surveillance program for birth defects. Annually, we receive a report from vital records with congenital anomalies listed on the birth certificate. Our Children with Special Healthcare Needs program provides service for some children with birth defects, but their data collection system does not allow accurate and consistent reporting of these conditions. |

| 20 | The questions are addressing two distinct types of jobs/staff. Questions should address each type of staff/job specifically instead of being combined together. |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Note: All of our (4) abstractors are registered nurses. Training: 1. Differences in coding among hospitals (e.g. rural, urban, teaching, etc.) 2. As a new program, we could greatly benefit from telephone/face-to-face contact with other active surveillance birth defects abstractors. Perhaps a 2 or 3 state gathering? |

Do you have tips or tools that you are willing to share with data collection staff in other states? If yes, please check all that apply.

| answer options | Response Percent | Response Count |
|-------------------------------------|---------------------|-------------------|
| Case finding | 39.13% | 9 |
| Record Review | 26.09% | 6 |
| Abstraction | 34.78% | 8 |
| Coding | 30.43% | 7 |
| Gathering data from passive sources | 34.78% | 8 |
| Relationship with the Hospital | 65.22% | 15 |
| Quality Assurance | 30.43% | 7 |
| Data Entry | 34.78% | 8 |
| Training | 39.13% | 9 |
| Other (please specify) | 21.74% | 5 |
| | answered question | 23 |
| | skipped question | 21 |

| Other (please specify) | |
|----------------------------------------------------|--|
| Currently redesigning database. | |
| XXX uses established standards for all areas above | |
| record linkage | |
| Web-based system | |
| Data abstraction manual | |