Facility Evaluations & Certification
By Brad Wohler & Jaclyn Button

“It is a well known psychological principle that in order to maximize the rate of learning, the subject must be fed back information of how well or poorly he is doing.” Gerald M. Weinberg.

The Florida Cancer Data System designed the Facility Evaluation Report to “maximize the rate of learning” by providing feedback to the reporting facilities. The report was designed to reveal areas of excellence as well as deficient areas; it will also present a succinct overall score incorporating the three keys of high quality data – Timeliness, Completeness and Accuracy. In addition, the Report facilitates the selection for the annual FCDS excellence in Reporting Award – the Jean Byers Award.

The facility evaluation report is designed as another tool in the data improvement process to monitor the progress of data collection. This report is meant to close part of the feedback loop to the reporting facilities and provide them with an outcome based evaluation. The report also enables FCDS to identify problem areas and monitor the progress of data collection being performed at the hospital level.

Previously, as many of you know, the Florida Cancer Data System relied on only one facet of the three keys of high quality data, namely completeness to evaluate whether or not a hospital was performing adequately. Completeness was determined by a combination of admissions reports, field coordinator input and the Affidavit of Completeness. Admission reports were averaged over the previous three years; that target was compared with admissions in the current year to estimate completeness. Field coordinator input was used to scrutinize data submissions and to monitor case-finding. Finally, the Affidavit of Completeness was a document based on the honor system - hospital registry submitted the affidavit if they felt they had indeed reported all of the current year’s cancer admissions.

There are approximately 280
hospitals in the state of Florida that report to the Florida Cancer Data System. Approximately two-thirds of these hospitals (180) are responsible for abstracting and reporting their cases directly to FCDS. These hospitals report more than 35 cases per year and utilize contract services or in-house personnel for case-finding and abstraction. The facility evaluation report was designed to provide feedback to those 180 hospitals. Discussion in this article is limited to those facilities that report more than 35 cases per year.

The Report is a graphical and numerical representation of the performance of a reporting facility over a given time period, detailing three principles of data appraisal: Timeliness, Completeness and Accuracy. The new report is essentially the same as your reports from last year, except for the addition of the Consolidated Performance Score and the Median Report Time. The Consolidated Performance Score quantifies data quality, giving the facility an overall rating, a synthesis of the three elements of data quality. The Median Report time measures the time it takes to report analytic cases based on the difference between admission date.

The score calculation algorithm is still being developed, but currently scores are calculated in the following manner. 1) Each facility is given base points calculated by the number of cases reported “on time” divided by the total number of admissions. In order to make the numbers proportional, percentages are used which are converted directly into points, i.e. 5% = 5 points. 2) Points are then added or subtracted from the base points according to the specific objective criteria shown in Table 1 below. 3) Finally the score is scaled to 100 points and a grade is assigned as follows: Excellent 90 – 100, Good 80 – 89, Fair 70-79, Needs Improvement.  

<table>
<thead>
<tr>
<th>+ Points</th>
<th>Increase in points</th>
<th>- Points</th>
<th>Reduction in points</th>
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<tbody>
<tr>
<td>Corrections</td>
<td>% of Points for number of corrections</td>
<td></td>
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</tr>
<tr>
<td>Cases reported after deadline up to six months late</td>
<td>% of cases reported after and up to six months after deadline</td>
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<tr>
<td>Cases reported after six months after deadline</td>
<td>Double reduction in points corresponding to 2 * (the percentage of cases reported after 6 months)</td>
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<tr>
<td>Timely response to abstract requests</td>
<td>Five points for answering Death Certificate Notification request</td>
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<tr>
<td>Delinquent or non-response to abstract requests</td>
<td>Five points for delinquent or non-response to Death Certificate Notification request</td>
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<tr>
<td>Five points for answering Inpatient and Outpatient abstract requests</td>
<td>Five points for delinquent or non-response to Inpatient and Outpatient abstract requests</td>
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<tr>
<td>Cases found via mortality clearance</td>
<td>Triple reduction in points, 3 * % of cases from Death certificates</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cases found via inpatient and outpatient clearance</td>
<td>Triple reduction in points, 3 * % of cases found from inpatient or outpatient match</td>
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Table 1
The timeliness graph uses a horizontal bar chart to represent the promptness of cancer reporting categorized as: on time, 60 days, 6 months, one year, or more than one year late. Timeliness is calculated based on the difference between receipt date and admission date for the three most recent years. However, as noted on table 1, only those facilities that report cases after the June 30th deadline are penalized. In addition, a table is displayed alongside the chart showing the actual counts used in the timeliness chart. The median report time will also be displayed in the Timeliness section, presenting the median, minimum and maximum time between admission date and receipt date for analytic cases only. The median is the middle of a distribution: half the scores are above the median and half are below the median. It is hoped that in the very near future, FCDS can incorporate results of the median report time into the scoring algorithm.

Completeness is assessed by inspecting the case-finding of the reporting facility. A pie chart illustrates the distribution of cases found via admissions, mortality clearance and inpatient/outpatient discharge (AHCA) data. Admissions are cases which were originally abstracted and reported by the facility. Mortality clearance and AHCA represent records that were found via external case-finding methods at FCDS, and subsequently requested from the hospital.

The assessment of accuracy is based on the degree to which the abstract complies to national standards. The vertical bar chart and table in this section represent records that passed edits, those that were corrected, or those records that had an edit override (i.e. “forced”).

The Consolidated Performance Score rates the most recent year of data contained in the report (Table 2). The Score evaluates timeliness, completeness and accuracy indicators and assigns an overall rating. The good news: over half of the hospitals received a “Fair” to “Excellent” rating. On the other hand, more than 40% need improvement.

As an example of how the Facility Evaluation Report functions, data from two fictitious hospitals are presented, Hospital X received an “Excellent” rating and Hospital Z received a “Needs Improvement” rating. An evaluation report for each is shown on page 4.

### Table 2

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Rating</th>
<th>Percent</th>
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<tbody>
<tr>
<td>21</td>
<td>Excellent</td>
<td>12 %</td>
</tr>
<tr>
<td>48</td>
<td>Good</td>
<td>27 %</td>
</tr>
<tr>
<td>38</td>
<td>Fair</td>
<td>21 %</td>
</tr>
<tr>
<td>73</td>
<td>Needs Improvement</td>
<td>41 %</td>
</tr>
</tbody>
</table>
“Quality is not something you install like a new carpet or a set of bookshelves, you implant it. Quality is something you work at. It is a learning process.” W. Edwards Deming.

The FCDS Facility Evaluation Report is a learning tool for FCDS as well as the reporting facility. The Report enables FCDS to identify opportunities for improvement, and to monitor the quality of data collection performed at the hospital level. Specifically, it identifies the areas where more training (conference calls, Register articles, regional workshops, etc.) may be needed with regard to Timeliness, Completeness or Accuracy.

The FCDS Facility Evaluation Report not only tracks the performance of a reporting facility, but also provides a clear, easy-to-read, objective summary for Abstractors, Hospital Administrators, and the Florida Department of Health.

The Report is a “pat on the back” for hospitals doing a superior job of reporting, and it is a gentle nudge for those who need improvement. It clearly defines specific goals to be attained.

The Consolidated Performance Score serves as an indicator of facilities that have earned the Jean Byers Award. The Score verifies that the cancer data abstracted and reported was
timely, complete and accurate. Only those hospitals that received an “Excellent” rating will be eligible for the Award. The Consolidated performance score will be displayed for data collected in 2004, but will not be used to select the Jean Byers recipients until 2005.

In the very near future, the Facility Evaluation Report will incorporate results from the Quality Control audits for each hospital. In addition, points will be given in the accuracy category for low numbers of unknown values in selected key variables for analytic cases, such as: race, sex, stage, birthplace, etc. Eventually, the Report will include three years of consolidated performance scores, enabling FCDS to look for data quality trends.

We will present the evaluation report at our upcoming annual meeting and look forward to the comments and input of the registry professionals. This evaluation has been designed as a quantitative measure of cancer registration in the state and is intended to assist the individual facilities in Florida in the same manner as NAACCR assists the central registries in the nation with its certification program.

“Devote yourself to excellence, and you just might achieve it.” Watts Humphrey.

March 2004
CTR Recipients

- Marie Cranmer, CTR - Sanford
- Melissa A. Schuster, CTR - Cape Coral
- Jason D. Strader, CTR - West Palm Beach
- Daniel P. Vargo, CTR - SW Ranches

ATTENTION REGISTRY SOFTWARE VENDORS, STATE AND CENTRAL REGISTRY STAFF

From: The Collaborative Staging Task Force

The Collaborative Staging Task Force discovered a problem with the CS calculation during the CS implementation process. Rest assured that when problems are detected, we will fix and test them, and then release a notice to public. The current problem has been fixed and has already passed several rounds of testing.

The current problem only affected prostate with a blank SSF3. It did not affect any other data.

It is imperative that Vendors switch to the new version as soon as possible. The revised version of cstage.dll is already posted on the CS Web pages at www.cancerstaging.org. Click on Collaborative Staging, and then on the Software Vendor button. The version number for this revision of cstage.dll is Version 010002.

If you have any questions, please feel free to e-mail Valerie Vesich at ajcc@facs.org or Tom Rawson from CDC at trk2@cdc.gov
Salt Lake City, Utah was host to the 2004 North American Association of Central Cancer Registries, Inc. Annual Conference June 8-10. The conference was set in the Marriott Downtown Hotel, surrounded by the magnificent views of the Wasatch Mountains. This year’s conference was full of very interesting topics as well as posters and exhibits that were displayed during the conference. The theme chosen this year “Exploring New Frontiers in Cancer Surveillance” presented innovative cancer surveillance activities, tools, operations, or methodologies, with an emphasis on genetic epidemiology.

The continued success of the Florida Cancer Data System is a result of the funding and support of the Florida Department of Health (DOH) and the Center’s for Disease Control (CDC); and the diligent work, dedication and commitment throughout the years of the FCDS Staff and the Florida Registrars. FCDS was proud to have the opportunity to showcase the accomplishments of this partnership to our NAACCR colleagues through the presentation of four projects; two oral presentations and two posters.

The oral presentations were: “Transforming Hands on Training into ‘On-Demand, Web-Based’ Modules” presented by Jill MacKinnon, and “Cancer=Spam: Using Naive Bayesian Anti-Spam Filters For Detection of Reportable Pathology Cases” presented by Lydia Voti. The posters displayed were: “Making the Grade: Facility Evaluations”, by Brad Wohler and “Does Augmenting Incident Data With Occupation and Industry From Death Certificates Enhance Analytical Capability?” by James Carreira. These were displayed during the poster session June 8-10th.

The following are the abstracts that were submitted for the presentations and posters:

Transforming Hands on Training into ‘On-Demand, Web-Based’ Modules:
The Florida Experience

JA MacKinnon, SHerna, M Rudolph; Florida Cancer Data System (FCDS) University of Miami School of Medicine, Miami, Florida, USA

A delicate balance exists between need and efficacy in training programs, particularly for statewide incidence registries. To be truly effective, the statewide training programs must address three levels of training: basic incidence, advanced and ad-hoc. The cost of these programs is extremely high to both the state and to the attendees. In addition to the development, preparation and travel costs, the employee absentee costs to the employer are not insignificant.

Training is not only a basic necessity, but must be considered a primary quality indicator for any incidence registry system. In Florida in the past, formal basic incidence training was held three times per year. The course consisted of two and one half days (17 contact hours) of intensive hands on edu-
cation provided by at least two Florida Cancer Data System (FCDS) staff members and attended by varying numbers of attendees. Today, the demand for training continues, but the competition for travel dollars is evidenced by the declining number of participants.

In order to resolve this problem, several years ago FCDS converted all the advanced and ad-hoc training to teleconferences. This medium has been very successful in reaching more people more often. In addition, this year, FCDS began the conversion of the 17 hour incidence training to a set of ‘on-demand’ web-based modules. Additionally, the basic, advanced and ad-hoc training will be tied into an abstractors ability to submit cases electronically to the statewide registry.

This presentation will describe the rationale and methodology FCDS utilized to transform the incidence training into a ‘low-tech’, cost-efficient alternative, and present the advantages and disadvantages in our experience.

CANCER=SPAM: USING NAIVE BAYESIAN ANTI-SPAM FILTERS FOR DETECTION OF REPORTABLE PATHOLOGY CASES
L. Voti, M. Rudolph, , M. Alvarez; Florida Cancer Data System (FCDS), University of Miami School of Medicine, Miami, Florida, USA.

FCDS has implemented pathology lab reporting for enhancing the completeness of the database and has received over 1.5 million e-path lab records from over 303 Florida labs for the period 2002-2003. Along with the cancer records, a large number of non-cancer records must be eliminated before matching with the registry database.

Despite the use of NAACCR phrase filters, a prohibitive number of false positives resulted for manual review. Therefore, the methodology of Naive Bayesian filtering, used for detection of spam email, was adopted. Random samples of manually reviewed lab reports produced cancer and non-cancer corpora and thus provided a priori knowledge of the probability that a word would be found in a cancer or a non-cancer record. The posterior probability of a path record being cancer-related was subsequently calculated. FCDS will discuss the feasibility of the use of this methodology for filtering of e-path and other text records in cancer registries.

MAKING THE GRADE: FACILITY EVALUATIONS
B. A. Wohler, J. H. Button, M. Herna, S. Peace, J. A. Mackinnon; Florida Cancer Data System (FCDS), University of Miami School of Medicine, Miami, Florida USA.

As part of our continuing effort to provide feedback to the reporting facilities, the Florida Cancer Data System (FCDS) has developed a Facility Evaluation Report. The Report is a graphical and numerical representation of the performance of a reporting facility over a given time period, detailing three principles of data appraisal: Timeliness, Completeness and Quality. Timeliness evaluates promptness of cancer reporting as on time, or 60 days, 6 months, one year and more than one year late, based on abstract submission and diagnosis dates. Completeness is assessed by inspecting the case-finding of the reporting facility; a graph shows the distribution of cases found via admissions, mortality clearance and inpatient/outpatient discharge data. The completeness component also includes data on “no response” from the reporting facility to record inquiries. Assessment of quality is based on the accuracy of the data reported to FCDS; the graph and table in this section represent records that passed edits, those that were corrected, or those records that had an edit override (forced). Finally, the Report gives an overall grade for a reporting facility in the form of a consolidated performance score. The FCDS Facility Report not only tracks the performance of a reporting facility, but it is also a clear, easy-to-read, objective document for Abstractors, Hospital Administrators, and the Florida Department of Health. In addition, the Report also facilitates selection for the annual FCDS excellence in Reporting Awards – the Jean Byers Award – based on Timeliness and Completeness.

(Continued on page 8)
DOES AUGMENTING INCIDENT DATA WITH OCCUPATION AND INDUSTRY FROM DEATH CERTIFICATES ENHANCE ANALYTICAL CAPABILITY?

J Carreira, L Fleming, JA MacKinnon, L Voti; Florida Cancer Data System, University of Miami, Miami, FL

Occupation and industry (O/I) codes are used by researchers to investigate hypotheses of occupational exposures as risks for cancer. CDC funded registries are required to collect O/I data when available. However, in the Florida Cancer Data System (FCDS) database, the O/I data are incomplete (completeness 18% and 21% respectively) and of poor quality, when in text form. FCDS conducted a pilot study to assess the efficacy of using O/I data from Florida’s 2000 death certificates to supplement the incident record.

The O/I data, from 50,000 death certificates that matched with the FCDS master file, were appended to the incident record. Since O/I information is not part of the electronic mortality record, the actual death certificates had to be retrieved from microfilm, printed, and the string content of the O/I fields manually entered into the electronic file. They were subsequently coded using NIOSH SOIC software, at 88% and 89% success rate respectively.

This presentation encompasses operational and methodological issues, the outcome of the automated coding of the O/I fields, their concordance in the incident and mortality databases, and the associated costs. The feasibility of this process will be discussed as it relates to methodological as well as financial constraints. An analysis comparing the concordance of O/I codes between death certificates and cancer incidence records by rapidly fatal versus long-term survival cancers will be presented.

JUNE 24TH MEMO: ALL VENDORS SUBMITTING FULL CANCER ABSTRACTS TO FCDS

(PLEASE REFER TO OUR WEBSITE, FCDS.MED.MIAMI.EDU, UNDER WHAT’S NEW TAB FOR UPDATES)

RE: Summary of FCDS Changes for Hospitals Submitting Full Cancer Abstracts for NAACCR V10.1 (Does not pertain to Pathology Data or Radiation Therapy ID Data)

The following time frame lists the upcoming changes for the FCDS conversion to NAACCR V10.1. Due to the 2003 abstracting extension authorized by COC, FCDS will maintain two complete and separate abstracting and uploading modules (one for V10 and one for V10.1). For the period July 1, 2004 through September 30, 2004, facilities may continue to submit 2003 data to FCDS in the V10 record layout. Any facility that is ready to submit their 2004 cases to FCDS may do so in a V10.1 format. The V10.1 module will be available for both single entry and batch upload submissions. V10.1 data submissions must include collaborative stage items and FORDS treatment (items 1290, 1292, 1294) for each record.

After September 30th all cases, regardless of their admission or diagnosis date, must be submitted in the V10.1 format (with all collaborative stage fields completed). This includes ‘historical’ cases. After September 30th FCDS will no longer accept Summary Stage 1977 or Summary Stage 2000 on any cases regardless of the data of admission or diagnosis. FCDS will no longer collect Roads fields (items 1296, 1646, 1647, 1648).

Thank you again for your patience. Please contact FCDS with any additional questions (305) 243-4600.
FCDS ANNUAL MEETING
Date: July 27-28, 2004
Location: Embassy Suites Hotel
USF/Busch Gardens, Tampa, FL
Contact: Bleu Thompson at 305-243-2635
Website: http://fcds.med.miami.edu

FCRA ANNUAL MEETING
Date: July 29-30, 2004
Location: Embassy Suites Hotel
USF/Busch Gardens, Tampa, FL
Contact: Barbara DeArmon at 813-632-1479
Website: http://fcra.org

NCRA PRE-CERTIFICATION WORKSHOPS
Date: August 7, 2004—Arlington, VA
Location: Courtyard Marriott Crystal City
Date: August 21, 2004—Las Vegas, NV
Location: Hampton Inn Tropicana Las Vegas

The one-day comprehensive workshops mentioned above will provide review and preparation for the CTR exam. This is only for experienced Cancer Registry professionals who meet requirements to sit for the CTR Exam. This is not for beginners. For additional information please contact: Leticia Salam (703) 299-6640 X14 or e-mail: lsalam@ncra-usa.org

CTR EXAM INFORMATION
Website: www.ncra-usa.org
Application Deadline: July 31, 2004
Testing Begins: September 11, 2004
Testing Ends: September 25, 2004

The Certification Examination will be administered during two 2-week testing periods on a daily basis, Monday through Saturday, excluding holidays, at LaserGrade Computer Testing Inc.‘s computer-based testing facilities managed by Professional Testing Corporation.

Who Should Attend:
All cancer case abstracting professionals, administrators from hospitals, ambulatory surgical centers, freestanding radiation facilities, pathology laboratories and those interested in the registry’s function, are invited to our two-day meeting. There will be Early Registration the evening before the conference, July 26th from 6:00p.m.– 8:00p.m. Regular Registration and continental breakfast will begin at 7:30 a.m. on July 27th. The meeting will start promptly at 8:30 a.m.

Materials to bring:
♦ Collaborative Staging Manual
♦ ICD-0-3

Registration Fee:
$25.00/person*
*Registration Fee is non-refundable
FCDS Receives “GOLD STATUS” on NAACCR Certification Process for the 2001 Incidence Data

Congratulations Florida! The Florida Cancer Data System received “Gold Status” Certification for the 2001 Incidence Data. Announcements of the Certification were made at the NAACCR Annual meeting in Salt Lake City, Utah. This is a tremendous accomplishment, and we wish to thank and congratulate all reporting facilities for helping us acquire this status. This is as much your achievement as ours. We look forward to your continued support in reporting quality, complete and timely data.

Gold and Silver Level Certification Status of NAACCR US Cancer Registries for 2001 Data

Note: US Map with certification results obtained from NAACCR website (http://www.naaccr.org)
June 9, 2004

TO: All Facility Administrators, Managers, Registrars and Contractors

FROM: Jill A. MacKinnon
Administrative Director

RE: Submission Requirements for 2003 and 2004 Cases

Due to the fact that the Commission on Cancer has extended the abstracting deadline for their approved hospital-based programs, the FCDS has modified the submission requirements for the 2003 and 2004 cases. There are two components to the modified requirements:

1) The June 30, 2004 deadline for receipt of all your 2003 cases HAS NOT been extended. Therefore, as always, to be eligible for the Jean Byers Award, all your 2003 cases must be received by June 30th. The Department of Health and the Agency for Health Care Administration WILL NOT be notified until October 1st of any late reporting.

2) Conversion of the FCDS database to NAACCR v10.1 will be implemented on October 1, 2004. All 2003 records received by September 30th may be submitted in the current format, using the existing single entry and batch upload procedures. For any facility or contractor that would like to begin entering or batch uploading 2004 cases in the new NAACCR v10.1 format (which includes all the collaborative stage elements) may do so beginning July 1. Explicit instructions will be posted on the FCDS web site.

I am sorry for this late minute notice, but we were notified of the CoC actions by Joyce Allan your FCRA liaison on May 21st and forwarded it to CDC for guidance. We just received approval of our plan from DOH and CDC today.

Should you have any questions please contact your field coordinator. As always, I thank you for your dedication to the FCDS and the cancer surveillance efforts in Florida.
Cancer Reporting Completeness Report

As of July 1, 2004

Calendar Year 2003 Admissions
90% Completed : 100% Expected

ABSTRACTOR CODES FOR HOSPITALS NOT PATH OR RADIATION CENTERS:

FCDS Cancer Abstractor Codes expired on June 30th, 2004.

The Abstractor Code Request form and memo is posted on the website under FCDS IDEA. You should have filled out a new form to continue submitting work to FCDS.

Completed forms should be sent to your Field Coordinator as soon as possible.