Patient Registration
Audit & Management Advisory Services Project #15-14

August 2015

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Background

There were 33,685 admissions to UC Davis Medical Center (UCDMC) for the year ending June 30, 2014. Inpatients contribute to the greatest part of UC Davis Health System (UCDHS) revenue. Total net patient revenue (inpatient plus outpatient) for the same period was approximately $1.6 billion.

Registration is the process by which the Health System verifies that staff have collected accurate patient demographic and guarantor information and the hospital will be able to bill the patient and/or another payor for treatment. Registration of inpatients can involve several UCDHS units, including hospital-based clinics, primary care clinics, the Emergency Department (ED), and the Financial Clearance Department. Cases go to Financial Clearance for review and verification after a patient is initially registered at the clinic or ED. Please see Appendix A for a more detailed description of the patient registration process.

In July of 2014 a new EPIC module, ADT/Prelude, was put into service for patient registration. ADT tracks the Admissions, Discharges and Transfers for inpatients, while patient registration information such as patient identification, demographic, insurance and guarantor information is stored in Prelude. Another system, Passport, also known as Real Time Eligibility (RTE), was implemented at the same time to help simplify the selection of the UCDHS plan code that corresponds to the patient’s insurance coverage.

Purpose and Scope

Audit & Management Advisory Services (AMAS) conducted a review of patient registration as part of the audit plan for fiscal year (FY) 2015, focusing primarily on the processes involved in inpatient registration. The purpose of the audit was to assess internal controls over the processes and procedures used to capture patient demographic and guarantor information and ensure accurate and timely billing for inpatient services. To conduct our audit, we reviewed system documentation, assessed applicable business practices, and interviewed key personnel in Financial Clearance, Information Technology (IT) and selected clinics. We also analyzed claim denial reports for the period July 1, 2014 through July 30, 2015.

Conclusions

Since the conversion to Prelude and Passport, UCDHS management has worked diligently to stabilize the new systems and develop and/or refine registration related business processes and practices. Registration related denials as a percentage of total hospital based denials have trended downward since the EPIC implementation. As was the case prior to the new systems implementation, however, errors attributed to registration related issues continue to be among the leading causes of claim denials at UCDHS (See Appendix B).

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Our audit identified opportunities for improvement in preventing claim denials, development of best practices, and providing training and feedback both to the Financial Clearance Patient Access Representatives (PARs), and individuals handling registration related duties in other areas of UCDHS. The PAR designation refers only to Financial Clearance staff. Employees handling registrations in clinics and other areas have different titles, such as Medical Office Service Coordinator (MOSC).

**OBSERVATIONS, RECOMMENDATIONS, AND MANAGEMENT CORRECTIVE ACTIONS**

**A. Denials Caused by Registration Errors**

Errors and omissions in registrations continue to cause problems and claim denials.

Errors in the initial patient registration are responsible for a large volume of the PARs' work load, and can result in claim denials if not corrected by the PARs.

A common type of registration-related error is the choice of an incorrect plan code. Registrars in the clinics have access to Passport, which facilitates identification of the correct UCDHS coverage plan code. (Passport interacts directly with insurance company information systems to identify and return information on the patient’s insurance coverage. For plans that are “mapped”, Passport will correlate the information to UCDHS insurer plan codes and present the registrar with a list of potential plan code choices.) However, effectiveness of this tool varies for two reasons. First, not all insurance plans have been mapped to UCDHS plan codes in Passport. Second, information retrieved by Passport does not automatically link to a plan code in EPIC, so clinic staff must review Passport results manually and select the correct plan code from an extensive list. IT Applications is actively working to map payor coverage information to UCDHS plan codes. Once a payor is mapped, Passport is able to significantly decrease the number of plan codes on the list a registrar sees. Plan mapping has the potential to greatly simplify clinic registrars’ choice of plan codes, reducing errors and subsequent denials.

Financial Clearance must research and correct any registration errors made at the clinics. To correct some types of errors (such as an incorrect plan code), it is often necessary to have information from the patient’s insurance card. For this reason, some clinics scan a copy of the patient’s card into the record at the time of registration. Financial Clearance staff uses the details on the card to verify and correct insurance coverage and authorizations. Some clinics, however, find it impractical to scan and upload insurance cards due to a lack of equipment and/or personnel immediately available to handle the task. In these cases, Financial Clearance may be required to contact the patient and ask again for the information, which can be annoying to patients and impair confidence. Additionally, effort spent contacting the patient for information increases the time it takes to complete a work queue², resulting in billing lags.

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² Cases go to Financial Clearance in the form of electronic lists, or “work queues”. The Financial Clearance supervisor assigns the cases to the work queue of a specific PAR.
There are some errors that are not or cannot be corrected by Financial Clearance staff. Often, errors in the patient’s registration and insurance record are not uncovered until a claim is denied by the insurance provider. Determining and correcting processes that lead to these errors and denials can be challenging. According to Financial Clearance, most errors happen because clinic registrars choose a plan code that does not correspond to the patient’s coverage information. Clinic staff believe that registration errors most often occur because patient coverage changes between the time of initial verification and the appointment date. Clinic staff also note that they have a large number of patients to serve, which takes priority over spending time researching the choice of a correct plan code.

The tables in Appendix B have an analysis of denials for hospital-based claims in FY2015. Overall, registration related denials as a percentage of overall hospital-based claim denials have trended downward since the implementation of EPIC in July 2014, and became more stable in January 2015. During the most recent six months, January – July 2015, 19% of all hospital-based claim denials, or $131.3 million, had ADT/Registration listed as the source. (Figure 1) The ADT/Registration category includes both the work of Financial Clearance and the registration function at the initial point of contact. We also analyzed denials where the reason given was problems with authorizations, eligibility or eligibility/registrations. Claim denials due to problems in these categories more specifically reflect the work of Financial Clearance. Denials in these categories for January – July 2015 were $85.5 million, or 12% of the total (Figure 2). The difference between ADT/Registration denials (Figure 1) and authorization, eligibility or eligibility/registrations (Figure 2) may be attributable to errors in the initial registration at the clinic level. More detailed denial reporting—including a more specific definition of the source categories, the staff member responsible for working the case, and the denial categories by source area—could help UCDHS educate staff, improve processes, and decrease denial rates.

**Recommendations**

1. IT Applications should continue with its efforts on Passport plan mapping, and map frequently used insurance providers as soon as possible.
2. Ambulatory Operations management should appoint one point of contact to work with Financial Clearance on issues related to registration errors.
3. In consultation with the PARs, management in Financial Clearance should maintain a log of specific problems originating in clinic registrations, and share this information with the clinic point of contact.
4. Management in Financial Clearance should also share the information with IT.
5. Since scanning patients’ insurance cards is not always feasible, clinic management should implement an alternative method to provide a copy of the patient’s insurance card to Financial Clearance.

**Management Corrective Actions**

a. IT Applications has completed plan mapping for Blue Cross and Blue Shield. Mapping for Aetna, Healthnet, and Cigna will be complete by November 15, 2015. Remaining payors Kaiser, Western Health Advantage, and United Health will be complete by February 15, 2016. IT Applications is also working with Financial Clearance and Passport to add the next tier of frequent payors to RTE. These payors will be mapped as they are added to RTE.
b. By January 15, 2016 Ambulatory Operations management will appoint an Analyst to work with Financial Clearance. This person can discuss common problems or trends and work with clinic management and staff to understand and resolve the causes. Financial Clearance will continue to contact clinics directly when necessary to resolve unique issues.

c. Financial Clearance management created a registration problem log on a shared drive which was made available to PARs on September 15, 2015. PARs use the log to enter details of specific problems originating in the clinics. Financial Clearance management will share this log with the clinic point of contact for brainstorming and discussion.

d. Financial Clearance management began incorporating discussions of the registration problem log and the need for additional training into their regular workgroup meetings with IT on September 15, 2015.

e. By January 15, 2016 clinic managers will implement a method to provide a copy of the patient’s insurance card to Financial Clearance for those patients being scheduled for elective admission.

B. Development of Best Practices

No procedure or best practice workflow document exists to help Patient Access Representatives (PARs) in Financial Clearance understand and use the best, most efficient method to complete a registration.

Supervisors in Financial Clearance have not required staff members to use specific tools or methods to work their cases. Until July 1, 2015, the new software and related processes were still considered to be in the implementation phase. No best practices were developed while the PARs were still learning.

A best practice workflow document would guide the PARs to standardize their practices and help Financial Clearance optimize the efficient processing of registrations. Without specific guidance, not all PARs use the same methods to work the cases in their queue. Some staff members interviewed were more comfortable with the manual methods they have historically used and are not using Passport. Others do not use the full range of Passport capabilities, instead performing some work manually. The variety of practices does not allow Financial Clearance to more effectively increase productivity and reduce denials. This same document could be used as the basis of new employee training when needed.

Recommendations

1. Financial Clearance should develop a Best Practices document for each registration team that includes the optimal workflows and tools. Please see Appendix A for a description of the teams.

Management Corrective Actions

a. IT Education is working with Financial Clearance to document the optimal workflow for Financial Clearance PARs, including the appropriate tools for PARs to use. This document will be written and reviewed by April 15, 2016.
C. Feedback to PARs

Financial Clearance has not provided regular feedback on errors and performance to the PARs since the implementation of Prelude.

The previous case audit (quality control review) process was suspended during the Prelude implementation period beginning in July 2014, as PARs were considered to be learning the new systems and processes. Neither their productivity nor accuracy were measured or reported to them during this period. Additionally, Financial Clearance has not consistently reviewed performance reports since the Prelude implementation. The purpose of measuring performance should be to hold staff accountable and also provide feedback to both staff and management to identify issues so that additional changes can be made.

Huron Consulting has been working with Financial Clearance to develop standards and evaluation tools for PAR performance and productivity. At the time of the audit, the draft standards and evaluation tools were under review by Huron and the PARs’ union. The standards cannot be used to hold staff accountable until approved by the union. In the interim, there is no process for the PARs to get informational feedback on their productivity or accuracy. Additionally, though there have been frequent upgrades and changes to the system and processes during the implementation period, Financial Clearance management sometimes has not informed the PARs of changes and problem resolutions within the Prelude system.

At the time of the audit, PARs had no way to know how their performance compared to the other staff members’ or the desired standard. Lack of feedback impedes the staff members’ ability to learn the system and improve. Additionally, lack of feedback on changes made, especially staff requested system changes, can leave PARs dissatisfied and with incorrect information.

Recommendations

1. Financial Clearance management should establish a process to provide performance feedback to the PARs while the proposed standards and evaluation tools are under review by the PARs’ union.
2. Once new evaluation standards and tools are approved by the union, the feedback should be changed to include the agreed-upon goals and consequences.
3. To the extent possible, performance feedback should include data about causes of denials and feedback from other units.
4. Financial Clearance management should make it a priority to communicate to the PARs results of problem reports made.

Management Corrective Actions

a. On October 15, 2015, Financial Clearance management began giving regular informational feedback to the PARs on their productivity and accuracy using the template developed by Huron Consulting.
b. After standards and tools are approved by the union, Financial Clearance will implement an evaluation schedule to measure performance for each PAR by June 15, 2016.

c. Performance feedback will include up-to-date information on claim denials due to registration errors, and the communication of any complaints or suggestions from other units. By November 15, 2015, the PARs will also be provided an opportunity to document any system issues or problems they have encountered.

d. By November 15, 2015, Financial Clearance management will begin reporting the results of all inquiries prompted by the PARs’ descriptions of system issues.

D. Training of PARs

**PARs have not received training specific to the duties of Financial Clearance.**

When the new Prelude system was implemented, IT Education gave general training on using the new system to register a patient. Financial Clearance PARs indicated the training was more applicable to the clinics than to their duties. PARs report having to learn how to use the new system on the job, by “shadowing,” “mentoring,” and “playing with the system”. Since then, there has been limited effort to have the PARs participate in ongoing training, despite the many updates and changes made to the system since implementation.

IT Education has developed a new Registration Competency training to provide additional training on particular errors which are still occurring with patient registration. IT Education is piloting the new training with clinic managers and supervisors, and will then offer it to staff members if the managers feel it would be useful. This training is directed at the duties in the clinics, so IT Education is developing a separate Registration Competency training specifically designed for the duties in Financial Clearance. IT Education has not yet gotten a commitment from Financial Clearance that their manager and supervisors will participate.

IT Education also reports that they offer other ongoing trainings but Financial Clearance has not participated, stating that registration errors stem from problems originating at the clinics and that it is the clinic staff that need training. As discussed in observation A above, registration related denials appear to be originating at both the clinics and Financial Clearance.

Adequate training is essential for the implementation of any new system. The new Prelude module and associated processes have been constantly revised since implementation, increasing the need for ongoing training. The lack of training has led to confusion amongst the PARs as well as some misunderstanding of how the system works.

For example, not all PARs understand the functions in the new system and their names. Some PARs understand that the names Passport and RTE both refer to the eligibility search software integrated into EPIC. Other PARs, though, do not. PARs reported in interviews that the results returned by Passport and RTE were different, or reported they only use RTE, and not Passport. In both of those cases, the PARs were actually referring to a separate web-based system, OneSource, which is also manufactured by the Passport company, but is not integrated into EPIC.
PARs do not consistently have a clear understanding of the purpose and capabilities of all the different tools at their disposal. Rather they have taught themselves enough to perform their regular duties. Additional training could help them learn to use the tools more effectively.

**Recommendations**

1. Financial Clearance should create a system which the PARs can use to track internal problems and questions.
2. The Financial Clearance Supervisor and Manager should review and act on questions and problems reported.
3. Financial Clearance should work with IT Education to construct training specific to the needs of the Financial Clearance PARs.
4. Financial Clearance management should take the customized Registration Competency training once it is complete.

**Management Corrective Actions**

a. By March 15, 2016, Financial Clearance management will work with IT Education to develop a process for PARs to document issues and questions as they arise.

b. By March 15, 2016 the Financial Clearance Manager will include a review of the log entries as part of the meeting with Financial Clearance supervisors. The review will focus on determining where additional training or information could assist the PARs and whether there is information to convey to IT.

c. By July 15, 2016, after the Best Practices workflow document described in Observation B is completed, IT Education will develop and present a training for PARs. The training will focus on the specific processes to be used by the PARs, and include instruction on the new workflow as well as any problems or questions captured on the system error log.

d. Contingent on completion of the training by IT Education, the Financial Clearance Manager and Supervisors will sign up for the customized Registration Competency training by April 15, 2016.

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APPENDIX A

Patient Registration Background

Registration of inpatients involves several UCDHS units, including clinics, physicians’ offices, the Emergency Department (ED), and the Financial Clearance department. It is the process by which the Health System verifies that 1) patients have received required forms and disclosures, 2) staff have collected accurate patient demographic and guarantor information, and 3) the hospital will be able to bill the patient, the patient’s insurance provider, a government program, and/or another guarantor for treatment. It is worth noting that registration is different than admission. Patients register only once, either in advance or at the time of their first inpatient visit to UCDHS. At subsequent visits, the patient is admitted, and information should be verified again, but this is not considered registration.

For cases of elective inpatient treatment, the registration process is initiated prior to the patient’s arrival at the hospital. Staff at the referring clinic or office schedules the inpatient procedure, and collects demographic and insurance information. After an appointment has been set, but prior to the treatment date, the patient appears in the work queue of a Patient Access Representative (PAR) in the Elective Team of the Financial Clearance department. This staff uses two online applications, EPIC Prelude and Passport, to verify, store, and submit patient demographic and insurance information to the Billing department. If the patient’s demographic information is incomplete, or if there appears to be an issue with insurance eligibility, Financial Clearance staff contacts the patient by phone for clarification. If Financial Clearance is not able to contact a patient prior to the appointment date, the appointment is either postponed or cancelled, and the referring clinic or office reschedules with the patient. If the patient is eligible, but there is no insurance authorization by 48 hours before the procedure, Financial Clearance notifies the clinic supervisor, clinic manager and the referring physician that the procedure will have to be reschedule until it is authorized, or cancelled altogether.

For cases of urgent inpatient treatment, the registration and eligibility verification may or may not have been initiated prior to the patient’s arrival at the hospital. An urgent patient’s first point of contact with UCDHS is typically the ED, but it is possible that information discovered during a clinic or office visit could give rise to an immediate transfer to the hospital for urgent care. In either event, staff at the first point of contact will make efforts to collect as much of the patient’s demographic and insurance information as possible. Sometimes the patient is able to give accurate information, sometimes the patient is impaired and gives faulty information, and sometimes the patient is unable to communicate altogether. Whatever information can be gathered about this patient appears in the work queue of a Patient Access Representative in the Urgent Team of the Financial Clearance department. Because in this case the patient arrives at the hospital unexpectedly, Financial Clearance staff must visit the patient at bedside to collect any missing or inaccurate information.
It is not uncommon for a patient to be admitted without a guarantor because an emergency situation necessitated treatment prior to registration. When it is found that a patient who has already received treatment has no guarantor, the patient appears in the work queue of a Financial Counselor from Financial Clearance. This staff meets with the patient to complete a patient financial information screening form, which asks for information related to the patient’s income, family size, assets, and expenses to determine whether the patient is likely to be eligible for a government-funded program such as Medi-Cal, Medicare, Victim Compensation, etc. If the patient appears to be eligible, the Financial Counselor assists the patient in completing the required steps to secure government funding. If the patient does not appear to be eligible, the patient is forwarded to the work queue of the Billing Department as a self-pay.

Inaccurate registration can be shown to be the largest reason for claim denials. These denials can result in loss of revenue, increased administrative costs and reputational damage. Billing staff may have to re-collect and re-verify patient demographic and insurance information for possibly a third time, and UCDHS can have write-offs of accounts receivable, because after receiving treatment a patient either cannot be contacted, or is found to be ineligible for insurance coverage or government support, and is otherwise unable or unwilling to pay.

Financial Clearance made several temporary changes in its processes at the time registration activities were switched to EPIC in July 2014. These changes were consistent with practices across UCDHS units that were affected by the move to EPIC. They included suspending formal employee performance evaluations; suspending one employee’s case audit function; and accepting training from Health System IT Education. These changes were made in the understanding that it was necessary to allow staff one year to adjust to the new system.
## APPENDIX B

### Denials by Source and Reason

#### Figure 1

Denials with Source Area ADT/Registration  
August 2014 - July 2015

<table>
<thead>
<tr>
<th>Month</th>
<th>ADT/Registration</th>
<th>All Sources</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug-14</td>
<td>2,009,912</td>
<td>3,723,817</td>
<td>54%</td>
</tr>
<tr>
<td>Sep-14</td>
<td>120,612,983</td>
<td>193,915,119</td>
<td>62%</td>
</tr>
<tr>
<td>Oct-14</td>
<td>23,907,920</td>
<td>95,080,823</td>
<td>25%</td>
</tr>
<tr>
<td>Nov-14</td>
<td>19,497,996</td>
<td>120,689,506</td>
<td>16%</td>
</tr>
<tr>
<td>Dec-14</td>
<td>15,071,442</td>
<td>87,317,330</td>
<td>17%</td>
</tr>
<tr>
<td>Jan-15</td>
<td>17,446,718</td>
<td>77,907,212</td>
<td>22%</td>
</tr>
<tr>
<td>Feb-15</td>
<td>21,259,316</td>
<td>97,186,852</td>
<td>22%</td>
</tr>
<tr>
<td>Mar-15</td>
<td>19,586,340</td>
<td>92,432,873</td>
<td>21%</td>
</tr>
<tr>
<td>Apr-15</td>
<td>13,212,952</td>
<td>105,373,152</td>
<td>13%</td>
</tr>
<tr>
<td>May-15</td>
<td>24,503,449</td>
<td>106,631,429</td>
<td>23%</td>
</tr>
<tr>
<td>Jun-15</td>
<td>15,302,144</td>
<td>102,659,082</td>
<td>15%</td>
</tr>
<tr>
<td>Jul-15</td>
<td>19,976,646</td>
<td>107,885,865</td>
<td>19%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>312,387,819</td>
<td>1,190,803,060</td>
<td>26%</td>
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<table>
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<tr>
<th></th>
<th>Aug - Dec Total</th>
<th>Aug - Dec Avg.</th>
<th>Jan - Jul Total</th>
<th>Jan - Jul Avg.</th>
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<tr>
<td>ADT/Registration</td>
<td>181,100,253</td>
<td>36,220,051</td>
<td>131,287,565</td>
<td>18,755,366</td>
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<td>All Sources</td>
<td>500,726,595</td>
<td>100,145,319</td>
<td>690,076,465</td>
<td>98,582,352</td>
</tr>
<tr>
<td>%</td>
<td>36%</td>
<td>35%</td>
<td>19%</td>
<td>19%</td>
</tr>
</tbody>
</table>
Figure 2
Denials for Authorizations, Eligibility or Eligibility/Registration
August 2014 – July 2015

<table>
<thead>
<tr>
<th>Month</th>
<th>Selected Categories</th>
<th>All Categories</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug-14</td>
<td>1,374,736</td>
<td>3,723,817</td>
<td>37%</td>
</tr>
<tr>
<td>Sep-14</td>
<td>90,045,074</td>
<td>193,915,119</td>
<td>46%</td>
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<td>Oct-14</td>
<td>13,775,527</td>
<td>95,080,823</td>
<td>14%</td>
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<td>Nov-14</td>
<td>7,915,504</td>
<td>120,689,506</td>
<td>7%</td>
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<td>Dec-14</td>
<td>5,340,510</td>
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<td>6%</td>
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<td>Jan-15</td>
<td>8,878,718</td>
<td>77,907,212</td>
<td>11%</td>
</tr>
<tr>
<td>Feb-15</td>
<td>16,270,683</td>
<td>97,186,852</td>
<td>17%</td>
</tr>
<tr>
<td>Mar-15</td>
<td>7,049,868</td>
<td>92,432,873</td>
<td>8%</td>
</tr>
<tr>
<td>Apr-15</td>
<td>10,850,743</td>
<td>105,373,152</td>
<td>10%</td>
</tr>
<tr>
<td>May-15</td>
<td>16,978,659</td>
<td>106,631,429</td>
<td>16%</td>
</tr>
<tr>
<td>Jun-15</td>
<td>9,662,535</td>
<td>102,659,082</td>
<td>9%</td>
</tr>
<tr>
<td>Jul-15</td>
<td>15,809,467</td>
<td>107,885,865</td>
<td>15%</td>
</tr>
<tr>
<td>Grand Total</td>
<td>203,952,023</td>
<td>1,190,803,058</td>
<td>17%</td>
</tr>
</tbody>
</table>

Aug- Dec Total  118,451,351  500,726,594  24%
Aug - Dec Avg.  23,690,270   100,145,319  22%
Jan - Jul Total  85,500,672   690,076,464  12%
Jan - Jul Avg.  12,214,382    98,582,352  12%