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Creation of a clinical exam form

Abstract

Documentation of a primary care eye exam serves many important functions. It serves as a history of test results, assessments, treatment plans and a defense against litigation. Additionally, examination documentation serves as the foundation to patient and insurance billing. The initial goal of this project focused on creating an ideal optometric exam form that would provide adequate space for documentation and be accepted among the faculty and attending doctors for use throughout the Pacific University College of Optometry (PUCO) clinics. The PUCO clinics are cunently using a clinic exam form that could benefit from an update. Increasing the amount of usable recording space was a high priority when updating the form. The basic format of the cunent exam was most easily improved by reorganizing the separate sections of the form. No perfect exam form exists; however, the exam form that has been created can offer greater ease of documentation for the examiner, a more organized flow of information, greater standardization of documentation from examiner to examiner and assist with proper billing. Proper billing and documentation are important aspects of any clinic operation. The use of ergonomically formatted exam forms can ultimately save time and money. The cunent exam form served as the foundation for the new exam form created. Whenever possible the more positive elements of Pacific University's cunent exam form were incorporated into the new exam form. The updated exam form retains elements that support the didactic curriculum at PUCO. This project is to review, compare and contrast the elements of several exam forms. With the help of Dr. Elizabeth Wyles, a compilation of the good elements of each form was incorporated into the final form. Results of this work will be submitted to Dr. Kenneth Eakland (Associate Dean for Clinical Programs) for review and possible use in the Pacific University College of Optometry Clinics.

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Subject Categories

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CREATION OF A CLINICAL EXAM FORM

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A thesis submitted to the faculty of the College of Optometry Pacific University Forest Grove, Oregon For the degree of Doctor of Optometry May, 2006

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CREATION OF A CLINICAL EXAM FORM

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Abran Olguin came to Pacific University from Albuquerque, New Mexico where he was born, raised and received his undergraduate degree in Biology from the University of New Mexico. He will receive his Doctor of Optometry degree from Pacific University College of Optometry in May of 2006. While at Pacific University Abran was the president of National Optometric Student Association, vice-president of Beta Sigma Kappa Optometric Honor Society, a member of the American Student Optometric Association and the Student Optometric Association. After graduation, Abran plans to return to Albuquerque to practice primary care optometry.

ABSTRACT

Documentation of a primary care eye exam serves many important functions. It serves as a history of test results, assessments, treatment plans and a defense against litigation. Additionally, examination documentation serves as the foundation to patient and insurance billing. The initial goal of this project focused on creating an ideal optometric exam form that would provide adequate space for documentation and be accepted among the faculty and attending doctors for use throughout the Pacific University College of Optometry (PUCO) clinics. The PUCO clinics are currently using a clinic exam form that could benefit from an update. Increasing the amount of usable recording space was a high priority when updating the form. The basic format of the current exam was most easily improved by reorganizing the separate sections of the form. No perfect exam form exists; however, the exam form that has been created can offer greater ease of documentation for the examiner, a more organized flow of information, greater standardization of documentation from examiner to examiner and assist with proper billing. Proper billing and documentation are important aspects of any clinic operation. The use of ergonomically formatted exam forms can ultimately save time and money. The current exam form served as the foundation for the new exam form created. Whenever possible the more positive elements of Pacific University's current exam form were incorporated into the new exam form. The updated exam form retains elements that support the didactic curriculum at PUCO. This project is to review, compare and contrast the elements of several exam forms. With the help of Dr. Elizabeth Wyles, a compilation of the good elements of each form was incorporated into the final form. Results of this work will be submitted to Dr. Kenneth Eakland (Associate Dean for Clinical Programs) for review and possible use in the Pacific University College of Optometry Clinics.

Keywords

Exam Form Routine Exam Form Documentation Records Billing

INTRODUCTION

Documentation of a primary care eye exam serves many important functions thus the routine eye exam form should be considered one of the most important documents in any optometric clinical setting. It serves as a history of test results, assessments, treatment plans and a defense against litigation. Additionally, examination documentation serves as the foundation to patient and insurance billing. Review of the "routine" exam form used in the Pacific University College of Optometry (PUCO) clinics revealed that adjustments could be made to improve the form. The initial goal of this project focused on creating an ideal optometric exam form that would provide adequate space for documentation and be accepted among the faculty and attending doctors for use throughout the PUCO clinics. An updated form would be of great benefit to the students and faculty of PUCO.

Exam Form Design

This updated exam form was created using Microsoft Word and Microsoft Excel. Finding a balance between the "box-checking" style and the "blank space" style to record tests results was an enormous challenge. Seeing as these forms are to be used in an educational setting it was more important to leave enough room for the students to write in test results rather than just check boxes. However, it was important to include the prewritten structures and procedures that should be performed on every patient in order to ensure a comprehensive eye exam and proper billing. The minimum structures/procedures that are to be viewed and performed in order to ensure a comprehensive eye exam according to Medicare standards have been bolded with an asterisk placed next to them. Including these tests, procedures and structures on the exam form should be very useful in cutting down on exam times. Additionally, this will allow for more accurate and comprehensive billing using Current Procedural Terminology codes (CPT). Specifically the E-M codes 99201-99204 (new patients), 99211-99214 (established patients) and Eye Codes 92004-92014 for comprehensive visual exams.

The exam form contains 6 sections: 1) Case History, 2) Entrance skills, 3) Refractive and Binocular Evaluation (OEP "21 point"), 4) Anterior Segment Evaluation, 5) Posterior Segment Evaluation and 6) Assessment/Diagnosis with Plan/Treatment. The revisions of each section will be discussed in detail below. After reviewing several charts that were submitted by Dr. Elizabeth Wyles, Dr. Denise Goodwin and Dr. Kent Schauer, common characteristics were noted among them.

Case History

Increased space for documentation would improve the Case History portion of the exam form. The reviewed forms were billing friendly using the Chief Complaint/Concern (CC), History of Presenting Illness (HPI), Review of Symptoms (ROS) and Past, Family and/or Social History (PFSH) design. It was important not only to follow this format for billing and insurance purposes but also for preparation of national boards. Including Mood/Affect, Neurological, Social History and Occupational Uses is also required in the

PFSH section of the history. Removing the column of horizontal lines that bisected the front page was necessary to allow increased space for documentation. Removal of column format will help collect a more thorough and complete case history.

Entrance Skills

The "entrance" skills section required some minor reformatting. It was important to keep the existing recording box for the patients' habitual prescription. The visual acuity grid was improved by including the number "20" as the numerator in each of the recording boxes. Placing a line through the box for Pinhole acuity OU was done to avoid unnecessary confusion. Certain procedures that are not routinely performed on every patient were selected for removal Spaces for the prewritten stereo acuity and color vision were removed from the entrance skills section. Space for these procedures was reserved under the "additional tests" section in the lower left hand corner. The color vision and stereo acuity tests were replaced with the Near Point of Accommodation, Blood Pressure and a prewritten PERRL (A). This section now contains more space for recording than the current exam form. As mentioned previously, the additional tests section can be used to record ancillary tests such as Maddox rod, red lens, color vision, stereo acuity, MEM, accommodative facilities, etc.

Refractive and Binocular Evaluation (21 Point Exam)

The refractive and binocular evaluation section was also improved from its current format. In its current format this section has limited space to clearly record numbers. The basic outline was left unchanged from the original exam form; however, it was enlarged by about 20%. This section now represents ¼ of the entire front page of the exam form. Of all the sections of our current exam form this is the area where more space for documentation should prove useful.

Anterior Segment

The anterior segment health portion of this exam form is much improved. The ocular health portions of the exam will remain on the back of the exam form. The anterior segment portion was previously split into right and left sides to represent the right and left eye. This has been changed by lining the structures on the left hand side of the exam form and placing the diagrams on the right hand side. The diagrams from the current exam form have been incorporated into the new version and should only be used in conjunction with the prewritten column structures. It is important not only to provide diagrams but also to write out the findings of the structures being examined. This portion requires the examiner to systematically view and record the listed structures. It also contains a greater amount of space to record comments or unusual findings.

Posterior Segment

The Posterior Segment section begins with the listing of the commonly used mydriatic and cycloplegic drugs along with their concentrations. Spaces to document the method of viewing the posterior segment and the lens (or lenses) used were also added. The lens used becomes important when determining the size of the optic nerve head (ONH). Additionally, the diagrams from the current exam form were included for use in

documentation. Having the diagrams located adjacent to the corresponding structures will allow for easier labeling of the drawings.

Assessment/Diagnosis and Plan/Treatment

The final section of the exam form uses a common format that provides space for the Assessment/Diagnosis and Plan/Treatment. The items that are to be documented under each Plan/Treatment are now located in parenthesis next to the Plan/Treatment section. Each Plan/Treatment should contain information on 1) Treatment, 2) Patient Education and 3) Return to Clinic (RTC) schedule. In the lower left corner is the grid for the Final/Tentative Rx. The Tentative Rx option will allow for clear documentation of a prescription that may need future changes should the patient enter VT or have a disease process that may change the prescription. As with the current form there are spaces near the bottom of the form for date, intern signature and attending doctor signature. The "Do Not Write below This Line" statement is included to prevent information from being covered when the exam form is placed into the patients chart.

Conclusions

With today's examinations and documentation moving to an electronic format, many believe that this exam form will soon become obsolete. However, the future of electronic medical records is still in its infancy. The incorporation of a newly updated exam form will benefit the students and doctors until that time comes. The transition in using the updated exam form should be relatively easy.

One of the primary goals of this exam form was to improve the standard of documentation and to standardize documentation among examiners. I hope this exam form is accepted among the faculty of Pacific University College of Optometry. As mentioned previously, no perfect exam form exists. However, the exam form created is much improved from its predecessor.

Shortly before submission of this thesis project Dr. Elizabeth Wyles met with Dr. Kenneth Eakland (Pacific University Director of Clinics) regarding the possible use of this form in the PUCO clinics. At this time Dr. Eakland plans to move forward with the current transition to Electronic Medical Records (EMR's) in the optometry clinics. However, Dr. Eakland agreed that the new form is an improvement from the current paper form and is therefore interested in using it in the creation of the new Electronic Medical Records.

| Pacific University Patient: | | | | | | | Vision Center | | Date: | |
|--|---------------------------|---------------------------------------|---|---|----------------------|---|---------------|--|----------------|----------------------|
| Grade/Occupation Intern Chief Complaint: | | | | | ntern | Attending Doctor | | | | |
| Chi | er Con | npiain | t: | · | | | | | | |
| HPI | : | | | | | LEE: | Resul | ts: | | |
| | | | | | | | | | | |
| Location: Quality: | | | | LME:,Results: Medications: Rx/OTC | | | | | | |
| Quanty: Duration: | | | | Drug Allergies:,Reaction | | | | | | |
| | | | | | Allergies:, Reaction | | | | | |
| Severity: | | | | Allergies | | | | | | |
| Timin | | | | | | DOLL | ROS: | | | |
| Conte | | | | | | POHx | FOHX | PM | ПНх | FMH |
| | ying Factor | rs: | | | | | | | | |
| Assoc | iated S/S: | | | | | - | | | | |
| Secon | dary Comp | laints: | | | | | | | | |
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| | | | | | | s | | | | |
| | al Rx: Spe | | | | T | Occupational U | Jses: | , Illicit Drugs (typer) | 5 N . 6 . 6.00 | 8 |
| Rx | Sphere | Cyl | Axis | Prism | Add | | | | | |
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| OD OS | | | 100010000 | | | OS:#3 Hab Ph. Far | | @ #13A Hab Ph. Near_ | Distortion: | |
| os | | | | | | OS:#3 Hab Ph. Far#4 Ret: OD: | | @ | Distortion:20/ | |
| OS Jses:_ | | | | | | OS:#3 Hab Ph. Far #4 Ret: OD: OS: | | @ #13A Hab Ph. Near_ | Distortion: | |
| os | | nided Near | Habit Dx | tual CL/S _j | | OS:#3 Hab Ph. Far#4 Ret: OD:OS:#5 HN OD:Ret OS: | | #13A Hab Ph. Near_ | | |
| OS Jses:_ | Dx 20/ | | | tual CL/S ₁ Ne 20/ | | OS: | | €_ #13A Hab Ph, Near_ | | VA OU 20/ |
| OS Jses: VA* | Dx 20/ | Near 20/ 20/ | Dx | Ne | ar | OS: | | #13A Hab Ph. Near_ | | VA OU 20/ |
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| OS Jses: VA* OD OS OU Dx CT COM'S IPC:_ D:_ P:_ upils* | Dx 20/ 20/ 20/ : | Near 20/ 20/ 20/ | Dx 20/ 20/ 20/ CT: Visual | Ne 20/ 20/ 20/ 20/ Fields*: | 20/ 20/ | OS: | / | #9 BO:#13A Hab Ph. Near#9 BO:#12 Vert Ph | | VA OU 20/ |

| Potient | | Date | | | | |
|--|-------------------------|------------------------------------|--|--|--|--|
| Patient Anterior Segment: ADNEXA/EYELIDS* Orbit Lids/Lashes Lac gland Lac drainage (puncta) CONJUNCTIVA* Bulbar, Palpebral CORNEA* Epith, Stroma, Endo, Tear Film ANTERIOR CHAMBER* Depth, Clarity IRIS* Flat, Pupils round LENS* Clarity, Ant & Post cap., cortex, nuclei | | Date | (i) (i) (ii) (iii) | | | |
| DPA: | @Tga:Tnc: < | @ | | | | |
| Posterior Segment: DFE: T 1% | P 2.5% C 1% C 0.5% OU @ | DO / BIO / High Pl | us(I ens used) | | | |
| C/D RATIO (H/V) ONH (size/shape) RIM TISSUE* DISC MARGIN* BLOOD VESSELS* SVP | | | | | | |
| MACULA* | | | | | | |
| VERVE FIBER LAYER 3ACKGROUND VITREOUS* 'ERIPHERY* Comments: | | | | | | |
| Assessment/Diagnosis | | Plan/Treatment (Tx, pt. ed. & RTC) | | | | |
| Final Rx/Tentative Rx Uses: Rx Sphere Cyl Axis Prise | | | | | | |
| OD | THI THI | | | | | |
| OS | | Comments | | | | |
| ate:Intern: | | Comments: | | | | |

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REFERENCES

- 1) Pacific University College of Optometry routine eye exam form
- 2) Wyles, E. O.D. Exam form
- 3) Goodwin, D. O.D. Tanasbourne Vision Center Exam form
- 4) Schauer, K. O.D. Exam form
- 5) Excel 2002 [Computer program]. Version 5.1 Microsoft Corporation
- 6) Word 2002 [Computer program]. Version 5.1 Microsoft Corporation