



RecordBoss is a service for identifying information in PDF and Word documents and many other image formats using various technologies integrated from third parties or developed under Advita. RecordBoss uses Artificial Intelligence (AI) and machine learning technologies to reliably identify and extract information without the use of a pre-existing OCR layer. RecordBoss can accurately identify key data in electronic medical records including:

- ICD-9/10 diagnostic and procedure codes
- CPT® & HCPCS billing codes, dates, and fees
- Generic and named brand drugs
- Searching of handwritten text
- Medical devices with model numbers
- Identify and organize all dates in any format
- Identify any custom terms or phrases
- Create a highly accurate searchable layer

Additional RecordBoss services also include:

- Excel report of all drugs ordered by doctor
- Excel chronology of medical events
- Comparison of billing ledgers to Medicare RVUs
- Privilege log searching
- Identification of poor-quality pages
- Web-based real-time reporting
- Long-term storage and retrieval of records
- Custom programming services

RecordBoss can identify any combination of custom terms or phrases then automatically annotate, bookmark, and highlight all uses of those terms within the original document or image.

The screenshot shows a medical record interface with a 'Bookmarks' sidebar on the left and a main document view on the right. The sidebar lists various categories like 'All Dates', 'Medical Devices', and 'Search Terms'. Under 'Search Terms', 'Fracture' is selected and highlighted with a red arrow. Below 'Fracture', several pages are listed, with 'Page 5' being the current view. The main document view shows a medical record for Kaiser Permanente Crescent Centre Medical Center. The patient's name is Emile C. Pinera, M.D. The document contains several sections: 'All ACC Notes (continued)', 'Progress Notes by Md Emile C. Pinera, M.D. at 6/15/2018 1:32 PM (continued)', 'FINDINGS: No fracture, malalignment, or joint effusion.', 'IMPRESSION: Negative left elbow.', 'LEFT ELBOW FX ROUT SUBSEQ (primary encounter diagnosis)', 'Plan: Ketorolac Inj 60 mg (TORADOL), tramADol (ULTRAM) 50 mg Oral Tab, APPLY ACE WRAP, Cyclobenzaprine (FLEXERIL) 10 mg Oral Tab, Ibuprofen (MOTRIN) 800 mg Oral Tab.', 'LEFT ELBOW JOINT PAIN', 'Plan: REFERRAL FAMILY PRACTICE EXTERNAL, Ketorolac Inj 60 mg (TORADOL), tramADol (ULTRAM) 50 mg Oral Tab, APPLY ACE WRAP.', 'Other recommendations rest the injured area as much as practical, apply ice packs, elevate the injured limb, use a sling, referral to Orthopedics for this injury, prescription for analgesic given, prescription for muscle relaxant, prescription for NSAID given.', 'PDMP checked. Compliant.', 'Future Appointments' table, and 'Emile C. Pinera, MD 6/15/2018 1:32 PM'. Below this, there is another 'Progress Notes by Chinara Smith RN at 6/15/2018 11:41 AM' section. The text in this section reads: 'is a 51 year old female who presents with chief complaint of ARM FRACTURE'. This text is highlighted with a red arrow. Below this, the 'Chief Complaint' section reads: 'Patient presents with ARM FRACTURE Left X1twk'. This text is also highlighted with a red arrow. The 'Future Appointments' table is as follows:

Date	Time	Provider	Department	Center
6/27/2018	4:00 PM	Pa-C Keith W Fort, P.A.	GW ORTHO	GW

RecordBoss can automatically export all billing codes and other data along with their corresponding page numbers, dates, descriptions, and charges directly to Excel and calculate the total of all charges within each record.

Original Billing Statement

Billing	Date	Prov.	TX Code	TX Description	Debit	Credit	Balance
72223952	11/29/2017	RUDON00C	99203	NEW PATIENT EXAM DETAILED	\$230.00	\$0.00	\$230.00
72223952	11/29/2017	RUDON00C	72052	X-RAYS-COMLETE/ CERVICAL	\$230.00	\$0.00	\$460.00
72223952	11/29/2017	RUDON00C	72070	thoracic x-ray	\$130.00	\$0.00	\$590.00
72223952	11/29/2017	RUDON00C	72100	A/P LAT L/P X-RAYS	\$130.00	\$0.00	\$720.00
72223952	11/29/2017	RUDON00C	97010	HOT PACK	\$35.00	\$0.00	\$755.00
72223952	11/29/2017	RUDON00C	G0283	EMS	\$40.00	\$0.00	\$795.00
72223952	02/18/2018	RUDON00C	IP	Insurance Payment	\$0.00	\$417.20	\$377.80
72223952	02/18/2018	RUDON00C	WO	Office Adjustment/Write-off	\$0.00	\$273.50	\$104.30

Exported Results to Excel

Page	Date	Code	Type	Description	Amount
1	11/29/2017	99203	CPT	Office or other outpatient visit for the evaluation and management of	230.00
1	11/29/2017	72052	CPT	Radiologic examination, spine, cervical; 6 or more views	230.00
1	11/29/2017	72070	CPT	Radiologic examination, spine; thoracic, 2 views	130.00
1	11/29/2017	72100	CPT	Radiologic examination, spine, lumbosacral; 2 or 3 views	130.00
1	11/29/2017	97010	CPT	Application of a modality to 1 or more areas; hot or cold packs	35.00
1	11/29/2017	G0283	HCPCS	Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care	40.00
1	12/01/2017	98941	CPT	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions	85.00
1	12/01/2017	97010	CPT	Application of a modality to 1 or more areas; hot or cold packs	35.00
1	02/18/2018	97012	CPT	Application of a modality to 1 or more areas; traction, mechanical	40.00
1	12/04/2017	98941	CPT	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions	70.00
1	12/04/2017	97112	CPT	Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular	40.00
1	12/04/2017	G0283	HCPCS	Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care	40.00
1	12/04/2017	97010	CPT	Application of a modality to 1 or more areas; hot or cold packs	40.00
1	02/18/2018	97012	CPT	Application of a modality to 1 or more areas; traction, mechanical	40.00
1	12/05/2017	98941	CPT	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions	70.00
1	12/05/2017	97112	CPT	Therapeutic procedure, 1 or more areas, each 15 minutes; neuromuscular	70.00
1	12/05/2017	G0283	HCPCS	Electrical stimulation (unattended), to one or more areas for indication(s) other than wound care, as part of a therapy plan of care	40.00
1	12/05/2017	97012	CPT	Application of a modality to 1 or more areas; traction, mechanical	40.00
2	12/05/2017	97010	CPT	Application of a modality to 1 or more areas; hot or cold packs	35.00
2	12/05/2017	97010	CPT	Application of a modality to 1 or more areas; hot or cold packs	35.00
2	12/06/2017	98941	CPT	Chiropractic manipulative treatment (CMT); spinal, 3-4 regions	85.00

Roundup Search Term Matches

Undo Redo Reset

Print Data Save as Share v9-de...

Roundup Categories Roundup Search Map

Filter

Top 3 Search Term for total Matches are:

- Lymphoma with 261,995
- Cancer with 220,073
- Chemotherapy with 85,446

Bottom 3 Search Term for total count of records are:

- 2-CJA with 1
- 6-MP with 1
- 5-FU with 1

Total Matches is 1,475,675.

Search Matches by Term

Search Terms	Other Important	Occupations	Immunosuppressive Meds	Group B Conditions	Group A Conditions	Diagnosis	Complications
CellCept			170				
Cerubidine			48				
Chemo					40,395		
Chemotherapy					85,446		
Child					22,607		
Chlamydia					317		
Chronic Myeloge...	32						
Chronic Myeloid	112						
Classic Hodgkin	145						
Colitis							1,835
Colostomy							888
Cortef			952				
Cortone			1				
Cosmegen			63				
Crixivan			8				
Cupemine			1				
Cytadren			2				
Cytopenia							13,257
Cytosar-U			55				
Cytosine arabino...			5				
Cytosin			5,542				
DACARBAZINE			157				
DACLIZUMAB			1				
DACTINOMYCIN			67				
DAUNORUBICIN			253				
DELAVIRINE			29				
DENILEURIN			4				
DEXAMETH			13,904				
DEXAMETHOSONE			28				
DIBANDSINE			19				
DILCL							11,466
DOCTAXEL			601				

Search Matches by Category

Category

- Diagnosis
- Group B Co...
- Group A Co...
- Immunosu...
- Complicati...
- Occupations
- Other Imp...
- null

Group By: Category
Search: Matches

RecordBoss can identify most handwriting and automatically annotate and highlight any matched data.

Time of Session: 10:00 Others Present: During Before/After:
CPT Code: 90791
Issues Discussed:
Week - 8/17 - 2018
Surgery - Nov 12 (middle swans)
Call Dr. [unclear] today - I will be back
Concerns & depression ↑
I'd had surgery on wrist - still expect to be back
(2017 - lots of surgery)
Interventions:

Issues Discussed:
I'm down - anxious
Diagnoses - anxiety - MRI - Pain
Paul to land 4x - tomorrow
Breaker - relax
Rto - dinner & alternative
Food 8+X - gluten free
I'm having a hard X - like my wife has
Staying away - Inha nurse
Interventions:
my Bldg don't know what to do
no contact of my daughters - Bldg a house
Progress: 1 2 3 4 5 6 7 8 9 10

RecordBoss can create a new copy of the original and add replace the existing OCR layer with a highly accurate version that includes searchable handwriting

Confidential Patient Information: Accompanied are Mercy Hospital results that are being delivered by HealthBridge. If you receive a clinical result for a patient that is not yours please fax to Mercy at 513-981-6124.

CT CHEST/ABDOMEN/PELVIS WITH CONTRAST

INDICATION- RESTAGING NHL

COMPARISON- May 24, 2010 CT chest abdomen pelvis

TECHNIQUE- Multiple axial sections were obtained following IV Optiray-320 without reaction. Delayed imaging was performed. Coronal reformatting was performed.

FINDINGS-
CHEST- The lung fields are clear without evolving nodules or pleural effusions. There is no thoracic adenopathy.
ABDOMEN- The liver, gallbladder, pancreas, adrenal glands and kidneys remain normal. The spleen is absent. The bowel and appendix are within normal limits. There is no abdominal adenopathy or free fluid. A few shotty mesenteric lymph nodes remain stable.
PELVIS- The urinary bladder is unremarkable. The prostate is unremarkable. There is no pelvic adenopathy or free fluid. Bone windows reveal no acute osseous abnormality.
IMPRESSION- Stable CT of the chest, abdomen & pelvis. No evidence of new or recurrent malignancy.

Original

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TECHNIQUE- Multiple axial sections were obtained following IV Optiray-320 without reaction. Delayed imaging was performed. Coronal reformatting was performed.

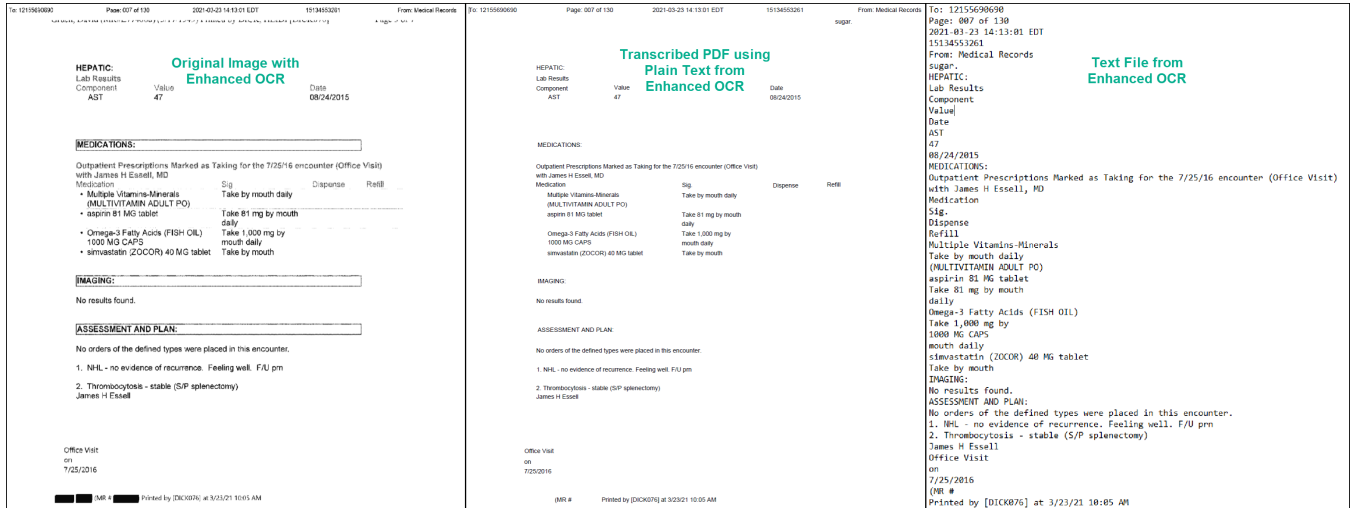
FINDINGS-
CHEST- The lung fields are clear without evolving nodules or pleural effusions. There is no thoracic adenopathy.
ABDOMEN- The liver, gallbladder, pancreas, adrenal glands and kidneys remain normal. The spleen is absent. The bowel and appendix are within normal limits. There is no abdominal adenopathy or free fluid. A few shotty mesenteric lymph nodes remain stable.
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IMPRESSION- Stable CT of the chest, abdomen & pelvis. No evidence of new or recurrent malignancy.

RB Version

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RecordBoss can return several types of output files depending on how the data will be used.

- **Original image with enhanced OCR** – old OCR layer is replaced for better searching
- **Transcribed PDFs** – extremely small files with no graphics often used for translation
- **Text files** – pure text for loading into a database or other 3rd party application
- **JSON** – returns specific data sets identified in each document for use in other applications



Most files are processed and available in just a few seconds. Files can be uploaded directly to the RecordBoss web portal, submitted through the RecordBoss API, or automatically retrieved from any popular cloud-based file service including OneDrive, Google Drive, Dropbox, AWS S3, and many more. RecordBoss does not require traditional OCR processing prior to processing.

RecordBoss adheres to the best practices for protecting documents and data. Documents are stored securely using AES-256 encryption and RecordBoss maintains a rating of A+ from Qualys SSL Labs ensuring SSL encryption is properly configured between remote client locations and RecordBoss services. RecordBoss also maintains compliance with the HIPAA privacy rule.

Watch a 1-minute introduction to RecordBoss at <https://www.advita.us/media/recordboss.mp4>