

ELECTRONIC MEDICAL RECORD IN PRIVATE PRACTICE

A Method of
Collecting and
Reporting
Outcomes
Data

AUTHORS:

KK Potawski, RD, LDR, CDC, NHA
MSA, Worcester Polytechnic Institute
Private Practice Dietitian,
Owner, Nutrend Healthcare Solutions,
Boylston, MA

AJ Martin, RD, LDR
Masters Student, Sustainability and Environmental
Management, Harvard University Extension School
BS, Framingham State University
Registered Dietitian, Emerson Hospital

kkpotawski@nutrend.com www.nutrend.com



LEARNING OBJECTIVE:

TO DEFINE THE METHOD OF USE AND BENEFITS OF
AN ELECTRONIC MEDICAL RECORD (EMR) TO:

- Collect Data
- Measure Outcomes
- Document progress
- PQRS Billing

REPORT REAL TIME RESULTS IN:

- Weight Change
- Laboratory Value Improvements

MONITOR:

- Activity Duration/Frequency
- Restaurant Frequency
- and Much More...



HIPAA:



PURPOSE OF STUDY

Reimbursement is vital to the long-term professional success of RD's. In Order for RD's to be reimbursed we need to use databases in our practices to collect, report and publish outcomes data to strengthen the foundation of clinical evidence used by insurers in making coverage decisions.



RECORDS PROBLEM:


Incomplete and Inefficient Paper Records

Paper Records Stored in Non-HIPAA Compliant Manner...

Regulated EMR
Not a Change
Can = For the better

DOCUMENTATION PROBLEM:


Patients and Physicians Receive Handwritten Notes or Notes are Typed up after Patient Visits



*Kal = Change
Zin = For the Nurse*

BILLING PROBLEM:


Costly, Error Ridden and Time Inefficient BILLING Process



*Kal = Change
Zin = For the Nurse*

OBESITY PROBLEM:

Obesity Trends* Among U.S. Adults
BRFSS, 1990, 2000, 2010




*Kal = Change
Zin = For the Nurse*

STUDIES:


Bradley DW. The Incremental Value of Medical Nutrition Therapy in Weight Management Managed Care. 2013 Jan;22(1):40-5.

Johnson, EQ, Valera, S. Medical Nutrition Therapy in Non-Insulin-Dependent Diabetes Mellitus Improves Clinical Outcome. J Am Diet Assoc. 2005 June;95(6) 700-701.

Delahaenty, LM, Sonnenberg, LM, Hayden, D., Nathan, DM. Clinical and Cost Outcomes of Medical Nutrition Therapy for Hypercholesterolemia: A Controlled Trial. J Am Diet Assoc. 2001 Sept; 101(9) 1021 - 1023




Bassuk SS, Manson JE. Epidemiological Evidence for the Role of Physical Activity in Reducing Risk of Type 2 Diabetes and Cardiovascular Disease. J Appl Physiol. 2005; 99(3): 1193-1204.



"How do you stay healthy? Well, I walk about 10 miles a day!"

HYPOTHESIS:

NUTRITION COUNSELING BY REGISTERED DIETITIANS IS RELATED TO WEIGHT LOSS AND CARDIOVASCULAR RISK FACTOR REDUCTION.



hypo@holisteed.com www.holisteed.com

METHODS:

hpatalano@kalzeed.com www.kalzeed.com

Patient Information:

hpatalano@kalzeed.com www.kalzeed.com

Patient Visits: Weights, Laboratory Values, Diagnostics and Meds

hpatalano@kalzeed.com www.kalzeed.com

Activity and Restaurants:

hpatalano@kalzeed.com www.kalzeed.com

Diagnosis: ICD-9 Codes

hpatalano@kalzeed.com www.kalzeed.com

Laboratory Values:

hpatalano@kalzeed.com www.kalzeed.com

<p>KalZenRD Dietitians saw:</p> <p>6,935 patients in</p> <p>17,837 visits</p> <p>After an average of 2 visits :</p> <p>3.2 pounds of weight lost</p> <p>11 point drop in Cholesterol</p> <p>15.9 mg/dl decrease in Fasting Blood Sugar</p> <p>0.5 point decrease in Hemoglobin A1C</p>	<p>Age = Change Sex = You Are Asses</p> <p>2012-2014 Data Analysis</p>
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<p>FASTING BLOOD SUGAR DECREASE</p>
<p>Age = 58.5, SD = 13.4 n = 120: Male = 37, Female = 65 Visit Duration average: 21.88 weeks mean = - 15.9* mg/dl, SD = 59.24</p> <p>(t-test: p < 0.01)* 95% Confidence Interval</p>

<p>HB A1C DECREASE</p>
<p>Age = 57.8, SD = 12.7 n = 135: Male = 52, Female = 55 Visit Duration average: 22.49 weeks mean = - 0.53* mg/dl, SD = 1.40</p> <p>(t-test: p < 0.0001)* 95% Confidence Interval</p>

<p>CHOLESTEROL DECREASE</p>
<p>Age = 54.2, SD = 13.9 n = 108: Male = 38, Female = 51 Visit Duration average: 21.47 weeks mean = - 10.89* mg/dl, SD = 31.82</p> <p>(t-test: p = 0.0005)* 95% Confidence Interval</p>

<p>LDL DECREASE</p>
<p>Age = 54.2, SD = 13.9 n = 97: Male = 32, Female = 47 Visit Duration average: 21.09 weeks mean = - 7.86 * mg/dl, SD = 29.33</p> <p>(t-test: p < 0.01)* 95% Confidence Interval</p>

<p>TRIGLYCERIDES DECREASE</p>
<p>Age = 53.7, SD = 13.2 n = 93: Male = 34, Female = 44 Visit Duration average: 20.44 weeks mean = - 39.90* mg/dl, SD = 67.5</p> <p>(t-test: p = 0.01)* 95% Confidence Interval</p>

VITAMIN D

Age = 51.4 , SD = 15.2
 n = 36: Male = 9, Female = 21
 Visit Duration average: 23.28 weeks
 mean = + 5.45* , SD = 13.35

(t-test: $p < 0.01$)*
 95% Confidence Interval

BODY FAT PERCENTAGE

Age = 42.1 , SD = 15.9
 n = 222: Male = 62, Female = 148
 Visit Duration average = 21.82 weeks
 mean = - 1%* , SD = 3%

(t-test: $p < 0.0001$)*
 95% Confidence Interval

WEIGHT LOSS: ALL PATIENTS

Age = 45.9, SD = 16.8
 n = 2464: Male = 578, Female = 1491
 Visit Duration average: 14.55 weeks
 mean = - 3.16 pounds* , SD = 13.16

(t-test: $p < 0.0001$)*
 95% Confidence Interval

WEIGHT LOSS: DIABETES

Age = 58.9, SD = 12.6
 n = 453: Male = 154, Female = 243
 Visit Duration average: 15.76 weeks
 mean = - 3.27 pounds* , SD = 15.61

(t-test: $p < 0.00001$)*
 95% Confidence Interval

WEIGHT LOSS: HYPERLIPIDEMIA

Age = 50.8, SD = 13.6
 n = 108: Male = 25, Female = 71
 Visit Duration average: 21.47 weeks
 mean loss = - 2.65 pounds* , SD = 5.31

(t-test: $p < 0.0001$)*
 95% Confidence Interval

WEIGHT LOSS: OBESITY

Age = 39.7 , SD = 13.4
 n = 580: Male = 140, Female = 419
 Visit Duration average: 12.95 weeks
 mean = - 3.91* pounds , SD = 14.58

(t-test: $p < 0.0001$)*
 95% Confidence Interval

OVERWEIGHT - WEIGHT LOSS

Age = 40.9, SD = 14.7
 n = 193: Male = 48, Female = 142
 Visit Duration average = 11.54 weeks
 mean = - 3.28 pounds* , SD = 7.72

(t-test: $p < 0.0001$)*
 95% Confidence Interval

HYPERTENSION - WEIGHT LOSS

Age = 48.8 , SD = 12.5
 n = 70: Male = 17, Female = 49
 Visit Duration average = 8.32 weeks
 mean = - 3.77 pounds* , SD = 12.27

(t-test: $p = 0.01$)*
 95% Confidence Interval

ACTIVITY DURATION INCREASE


Age = 42.8 , SD = 15.5
 n = 586 : Male = 158, Female = 356
 Visit Duration average: 17.23 weeks
 mean = +21 Minutes/week* , SD = 21.89

(t-test: $p < 0.001$)*
 95% Confidence Interval

Kai = Change Zen = For The Better

FUTURE

Analyze for Laboratory Value Changes with and without Medications.
 Develop Methods to Provide Analysis for Individual Diets or Group Outcomes Quarterly.



kpeteloro@kaizen.com www.kaizen.com

Anthropometrics Report

Anthropometrics

Parameter	Value	Unit	Target	Pass/Fail	Color
Weight	175.0	kg	170.0	Pass	Green
Height	178.0	cm	175.0	Pass	Green
BMI	27.5	kg/m ²	25.0	Pass	Green
Waist Circumference	95.0	cm	90.0	Fail	Red
Waist to Hip Ratio	0.95		0.90	Fail	Red
Waist to Height Ratio	0.53		0.50	Fail	Red
Neck Circumference	38.0	cm	35.0	Fail	Red
Arm Circumference	35.0	cm	32.0	Fail	Red
Hand Circumference	19.0	cm	18.0	Fail	Red
Foot Length	27.0	cm	26.0	Fail	Red
Foot Width	10.0	cm	9.5	Fail	Red
Shoe Length	28.0	cm	27.0	Fail	Red
Shoe Width	10.0	cm	9.5	Fail	Red

kpeteloro@kaizen.com www.kaizen.com

Patient Lab Report:

Patient Lab Report

Lab	Value	Unit	Target	Pass/Fail	Color
Cholesterol	200	mg/dL	200	Pass	Green
Triglycerides	150	mg/dL	150	Pass	Green
HDL	40	mg/dL	40	Pass	Green
LDL	130	mg/dL	130	Pass	Green
Glucose	100	mg/dL	100	Pass	Green
Hemoglobin A1c	5.7	%	5.7	Pass	Green

kpeteloro@kaizen.com www.kaizen.com

Resolved Diagnosis and Discontinued Medications

Resolved Diagnosis and Discontinued Medications	Resolved Date	Discontinued Date	Resolved Status
100	1/1/2015	1/1/2015	Resolved
101	1/1/2015	1/1/2015	Resolved
102	1/1/2015	1/1/2015	Resolved
103	1/1/2015	1/1/2015	Resolved
104	1/1/2015	1/1/2015	Resolved
105	1/1/2015	1/1/2015	Resolved
106	1/1/2015	1/1/2015	Resolved

kpatalow@kabrond.com www.kabrond.com

Weight Lost by MD Chosen

MD Chosen	Weight Lost (lbs)	Current Weight (lbs)	% Body Fat	Current BMI
Dr. John	120	150	20	20.0
Dr. Jane	80	120	15	18.2
Dr. Mike	100	130	18	19.0
Dr. Sarah	90	110	16	17.9
Dr. Tom	110	140	19	18.2

kpatalow@kabrond.com

Weight Loss by Physician

Physician	Weight Lost (lbs)	Current Weight (lbs)	% Body Fat	Current BMI
Dr. John	120	150	20	20.0
Dr. Jane	80	120	15	18.2
Dr. Mike	100	130	18	19.0
Dr. Sarah	90	110	16	17.9
Dr. Tom	110	140	19	18.2

kpatalow@kabrond.com

Total Weight Lost, Current BMI, % Body Fat

Physician	Weight Lost (lbs)	Current Weight (lbs)	% Body Fat	Current BMI
Dr. John	120	150	20	20.0
Dr. Jane	80	120	15	18.2
Dr. Mike	100	130	18	19.0
Dr. Sarah	90	110	16	17.9
Dr. Tom	110	140	19	18.2

kpatalow@kabrond.com

PQRS Medicare Billing

Physician	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
Dr. John	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dr. Jane	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dr. Mike	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dr. Sarah	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dr. Tom	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

kpatalow@kabrond.com www.kabrond.com

PQRS: Preventive Care and Screening BMI

18 Years +

Minimum once per year

Normal BMI:
 65 Yrs+ BMI = 23-30
 18 - 64 Yrs BMI 18.5 - 25

If above or below normal BMI, document and have a follow-up plan.

CPT CODES:
 97802, 97803

PQRS: Preventive Care and Screening BMI**CODES AND DESCRIPTION:**

G8420 - Normal BMI

G8417 - Greater than Normal, follow-up documented

G8418 - Less than Normal, follow-up documented

G8419 - Calculated but patient not eligible for f/u

G8422 - Not documented

G8421 - Not calculated, document* reason why

G8410 - BMI < or > norms, no follow up documented*

* DOCUMENTATION ON WORKSHEET AND IN THE MEDICAL CHART

PQRS: DOCUMENTATION OF CURRENT MEDICATIONS IN MEDICAL RECORD

18 Years +

At each visit

All current RX, OTC, herbals, vitamin/mineral dietary supplements.

Medication name, dosage, frequency and route of administration

Report whether you documented a list of patient's medications, including all parameters.

CPT Codes:

97802, 97803, 97804, G0270

PQRS: DOCUMENTATION OF CURRENT MEDICATIONS IN MEDICAL RECORD**CODES AND DESCRIPTION:**

G8427 - Documented

G8430* - Not documented, *Document reason why

G8428* - Current meds not documented, reason not given.

* DOCUMENTATION ON WORKSHEET AND IN THE MEDICAL CHART

PQRS: DM HEMOGLOBIN A1C POOR CONTROL

18 - 75 Years

Minimum once per year

Most recent A1C

Report: A1C > 9.0%; or 7-9% or < 7% with ICD-9 diabetes codes

CPT Codes:

97802, 97803, 97804, G0270, G0271

PQRS: DM A1C POOR CONTROL**CODES AND DESCRIPTION:**

G046F - A1C > 9.0%

G045F - A1C = 7.0% - 9.0%

G044F - A1C < 7.0%

G046F-W - A1C not performed during the performance period of 12 months

PQRS: DM LDL-C CONTROL

18 - 75 Years

Minimum once per year

Most recent LDL-C

With ICD-9-CM diabetes diagnostic codes

Report: Adequate control (<100 mg/dl) was <100 - 129 mg/dl or >130 mg/dl

CPT Codes:

97802, 97803, 97804, G0270, G0271

PQRS: DM LDL-C CONTROL

CODES AND DESCRIPTION:

3048F - LDL-C <100 mg/dl

3049F - LDL-C 100 - 129 mg/dl

3050F - LDL-C > or = 130 mg/dl

3048F-09 - LDL-C not performed during the performance period (12 months) reason not stated

PQRS: ELDER MALTREATMENT SCREEN AND FOLLOW-UP PLAN

65 Years +

Once per reporting year

Documented elder maltreatment screen and a documented follow-up plan on the date of a positive screen.

Report whether or not you screened for elder maltreatment and documented a follow up plan if necessary.

PQRS: ELDER MALTREATMENT SCREEN AND FOLLOW-UP PLAN

CODES AND DESCRIPTION:

68723 - Positive Screen and f/u documented

68734 - Screen documented, so follow up plan because screen was negative

68945 - Screen documented, patient not eligible

68525 - Not screened, patient not eligible

68725 - Screen positive, follow-up plan not documented, reason not given

68526 - No documentation of maltreatment screen, reason not given

PQRS Medicare Billing

ELDER MALTREATMENT SCREENS:

Hwalek-Senstock Elder Abuse Screening Test

Vulnerability to Abuse Screening Scale

Elder Abuse Suspicion Index

kpatalano@kaisernd.com www.kaisernd.com

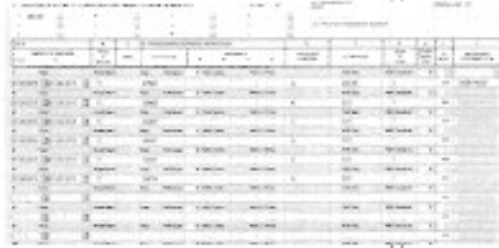
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kpatalano@kaisernd.com www.kaisernd.com

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kpatalano@kaisernd.com www.kaisernd.com

PQRS Medicare Billing



A screenshot of a PQRS Medicare Billing report table. The table contains multiple columns with headers including 'Patient Name', 'Provider', 'CPT Code', 'ICD-9 Code', 'Quantity', 'Rate', 'Total', and 'Status'. The data rows are dense and contain alphanumeric characters and numbers.

Patient Name	Provider	CPT Code	ICD-9 Code	Quantity	Rate	Total	Status
...
...
...
...

kgelofano@kaisernd.com www.kaisernd.com

