

# Operating a “data-based” hospital dental clinic

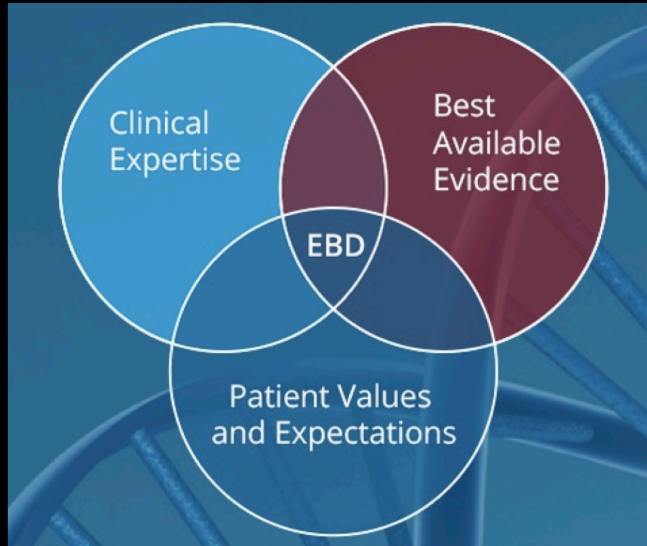
“Experts often possess more data than judgment”  
~ Colin Powell



Canadian Association  
of Hospital Dentists 



There is no evidence-based care without data



My favorite evidence

And the way things  
Indeed may go....

The N=1 trial



At PMH we use databases **huuuge!**





## Our databases....

- 106 in total – linked/unlinked
- Many active, some dormant
- Some admin only (?)
- Some patient tracking
- Some complication tracking

ADP BILLING STAGE  
ADP FEE SCHEDULE  
ADP FORM TO DR 1  
ALL AML screening  
autoopen  
Bad Debts Lists  
Bad Debts Lists 1  
BILLING SUMMARY  
CardiacSx  
CASH - PATIENTS  
CHEQUES - INSURANCE  
CHEQUES - PATIENTS  
Clinic Sessions  
COMPLETE SIGN C-F  
CONFIRMATION SLIP - ADP  
CONFIRMATION SLIP - OCULAR  
CreateRoomRecsFP3  
Dental Accts Rec Control Balance  
Dental Bills  
Dental Imaging Report  
Dental Monthly Payment Record  
Dental Purchase Requisitions  
dental staff absences  
Dentists  
DENTISTS MONTHLY BILLING Report  
DENTISTS ROUNDS  
DNK  
DOUBTFUL DENTAL ACCT  
Dr List  
ENTER JOURNALS - NEW  
FAX  
Fee Schedules  
Flu Trays SS approval letter  
GWA Fee Schedules  
GWA CLAIM FORM  
INS. UNDERPAYMENT  
Joseph fee schedule  
Language Analysis  
LETTER TO ADP - REASONS  
LETTER TO OUTSIDERS  
LETTERHEAD - PMH LOGO  
LETTERPAPER WITH PMH LOGO  
Letters  
LTR TO SS OCULAR PROS  
Medical and Surgical Supplies  
Monthly blg rec report  
NEW ADP INVOICE  
New dental bills[1]  
NEW FEE SCHEDULE  
New Letterhead  
NEW TOTAL BILLING & payment  
NEW TOTAL BILLING & SPAYM  
NOT COVERED BY INS  
Ocular Fee Schedule  
Ocular notes  
OHIP ENVELOPE  
OHIP Submission File  
OLD LEDGER CARDS  
OMRP  
Oncall Schedule  
OP-Insurance ADP  
OUT OF PROVINCE CLAIM FORM  
Pan log  
Patient Consent form  
Patient Database  
PATIENT PAYING ON ACCOUNT  
Patient's ledger cards  
Patient's RECEIPT  
PHOTO FILE  
PMH Dental Clincians  
PMH Dental Lab invoices  
PMH Dental Workload  
PMH Staff Dental Database  
PMH Staff Standard Dental Claim  
PMH STATEMENT  
POA Agreement

# Why use ? / uses of databases?

Quality control monitoring

**Administrative uses**

Quality control monitoring As a research tool

Administrative uses

**As a research tool**

**Quality control monitoring**

Administrative uses

As a research tool



Sample admin database

Browse

Layout: Layout #2

Record: 1

Total: 292

Unsorted

| PAGE ?            |                      | DENTISTRY ON CALL SCHEDULE -REVISED |            | Wednesday, April 20, 2016 |  |
|-------------------|----------------------|-------------------------------------|------------|---------------------------|--|
| first day         | last day             | 2016                                | First call | WOOD                      |  |
| Tue, Feb 2, 2016  | to Mon, Feb 8, 2016  | 2016                                | Son        | FAMILY DAY                |  |
| Tue, Feb 9, 2016  | to Mon, Feb 15, 2016 | 2016                                | Lee        |                           |  |
| Tue, Feb 16, 2016 | to Mon, Feb 22, 2016 | 2016                                | Maxymiw    |                           |  |
| Tue, Feb 23, 2016 | to Mon, Feb 29, 2016 | 2016                                | Chadwick   |                           |  |
| Tue, Mar 1, 2016  | to Mon, Mar 7, 2016  | 2016                                | Lee        |                           |  |
| Tue, Mar 8, 2016  | to Mon, Mar 14, 2016 | 2016                                | Chadwick   |                           |  |
| Tue, Mar 15, 2016 | to Thu, Mar 21, 2016 | 2016                                | AlMardini  | GOOD FRIDAY EASTER SUNDAY |  |
| Tue, Mar 22, 2016 | to Mon, Mar 28, 2016 | 2016                                | Burgess    |                           |  |
| Tue, Mar 29, 2016 | to Mon, Apr 4, 2016  | 2016                                | Lee        |                           |  |
| Tue, Apr 5, 2016  | to Mon, Apr 11, 2016 | 2016                                | Maxymiw    |                           |  |
| Tue, Apr 12, 2016 | to Mon, Apr 18, 2016 | 2016                                | Wood       |                           |  |
| Tue, Apr 19, 2016 | to Mon, Apr 25, 2016 | 2016                                | Chadwick   |                           |  |
| Tue, Apr 26, 2016 | to Mon, May 2, 2016  | 2016                                | Son        |                           |  |
| Tue, May 3, 2016  | to Mon, May 9, 2016  | 2016                                | Wood       |                           |  |
| Tue, May 10, 2016 | to Mon, May 16, 2016 | 2016                                | Lee        | VICTORIA DAY              |  |
| Tue, May 17, 2016 | to Mon, May 23, 2016 | 2016                                | Maxymiw    |                           |  |
| Tue, May 24, 2016 | to Mon, May 30, 2016 | 2016                                | Watson     |                           |  |
| Tue, May 31, 2016 | to Mon, Jun 6, 2016  | 2016                                | Wood       |                           |  |
| Tue, Jun 7, 2016  | to Mon, Jun 13, 2016 | 2016                                | Burgess    |                           |  |
| Tue, Jun 14, 2016 | to Mon, Jun 20, 2016 | 2016                                | Lee        |                           |  |
| Tue, Jun 21, 2016 | to Mon, Jun 27, 2016 | 2016                                | Watson     | CANADA DAY                |  |
| Tue, Jun 28, 2016 | to Mon, Jul 4, 2016  | 2016                                | Wood       |                           |  |
| Tue, Jul 5, 2016  | to Mon, Jul 11, 2016 | 2016                                | Wood       |                           |  |
| Tue, Jul 12, 2016 | to Mon, Jul 18, 2016 | 2016                                | Chadwick   |                           |  |
| Tue, Jul 19, 2016 | to Mon, Jul 25, 2016 | 2016                                | Son        | CIVIC HOLIDAY             |  |
| Tue, Jul 26, 2016 | to Mon, Aug 1, 2016  | 2016                                | Maxymiw    |                           |  |
| Tue, Aug 2, 2016  | to Mon, Aug 8, 2016  | 2016                                | Lee        |                           |  |
| Tue, Aug 9, 2016  | to Mon, Aug 15, 2016 | 2016                                | Wood       |                           |  |
| Tue, Aug 16, 2016 | to Mon, Aug 22, 2016 | 2016                                | AlMardini  |                           |  |
| Tue, Aug 23, 2016 | to Mon, Aug 29, 2016 | 2016                                | Son        | LABOR DAY                 |  |
| Tue, Aug 30, 2016 | to Mon, Sep 5, 2016  | 2016                                | Watson     |                           |  |
| Tue, Sep 6, 2016  | to Mon, Sep 12, 2016 | 2016                                | Maxymiw    |                           |  |
| Tue, Sep 13, 2016 | to Mon, Sep 19, 2016 | 2016                                | Lee        |                           |  |
| Tue, Sep 20, 2016 | to Mon, Sep 26, 2016 | 2016                                | Burgess    |                           |  |
| Tue, Sep 27, 2016 | to Mon, Oct 3, 2016  | 2016                                | Wood       | THANKSGIVING              |  |
| Tue, Oct 4, 2016  | to Mon, Oct 10, 2016 | 2016                                | AlMardini  |                           |  |
| Tue, Oct 11, 2016 | to Mon, Oct 17, 2016 | 2016                                | Maxymiw    |                           |  |
| Tue, Oct 18, 2016 | to Mon, Oct 24, 2016 | 2016                                | Lee        | HALLOWE'EN                |  |
| Tue, Oct 25, 2016 | to Mon, Oct 31, 2016 | 2016                                | Son        |                           |  |
| Tue, Nov 1, 2016  | to Mon, Nov 7, 2016  | 2016                                | Wood       |                           |  |
| Tue, Nov 8, 2016  | to Mon, Nov 14, 2016 | 2016                                | Chadwick   |                           |  |
| Tue, Nov 15, 2016 | to Mon, Nov 21, 2016 | 2016                                |            |                           |  |

| Dentist        | Home number    | pager number | other number                    |
|----------------|----------------|--------------|---------------------------------|
| Dr. Maxymiw    | 416-248-1667   | 416-790-7326 | 647-984-1340 (cell)             |
| Dr. Lee        | 416-486-4492   | 416-790-7270 | 416-473-9566 (cell)             |
| Dr. Wood       | 1-905-637-8703 |              | 416-219-9767 (cell)             |
| Dr. Burgess    | 416-534-9884   | 416-714-6098 | 416-979-4900 ext 4666 (Faculty) |
| Dr. Son        | 905-762-9885   |              | 647-205-8887 (cell)             |
| Dr. Al Mardini | 905-538-1821   | 416-790-7111 | 905-929-6253 (cell)             |
| Dr. Chadwick   |                |              |                                 |
| Dr. Watson     | 416-300-5774   |              | 416-668-3935 (cell)             |

Browse  
  
 Layout:  
 Entry

## DENTAL STAFF VACATION TIME AND COVERAGE

**(UPDATED April 20, 2016)** 12:44:21 PM

Record:  
  
 Total:  
 8088  
 Unsorted

| DENTIST ABSENT | DATE OF ABSENCE   | SESSION          | vacation type          | COMMENTS/COVER               | TCS Code |
|----------------|-------------------|------------------|------------------------|------------------------------|----------|
| MAXYMIW        | Mon, Jun 23, 2003 | AM Monday        | <u>vacation TTH</u>    | WOOD                         |          |
| MAXYMIW        | Tue, Jun 24, 2003 | PM Tuesday       | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| MAXYMIW        | Wed, Jun 25, 2003 | AM Wednesday     | <u>vacation TTH</u>    | WOOD                         |          |
| MAXYMIW        | Thu, Jun 26, 2003 | AM & PM Thursday | <u>vacation</u>        | CLOSED SESSION               |          |
| MAXYMIW        | Fri, Jun 27, 2003 | AM Friday        | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| MAXYMIW        | Mon, Jun 30, 2003 | AM Monday        | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| ALL STAFF      | Tue, Jul 1, 2003  | AM & PM Tuesday  | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| MAXYMIW        | Wed, Jul 2, 2003  | AM Wednesday     | <u>vacation TTH</u>    | WOOD> BURGESS                |          |
| MAXYMIW        | Thu, Jul 3, 2003  | AM & PM Thursday | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| MAXYMIW        | Fri, Jul 4, 2003  | AM Friday        | <u>vacation TTH</u>    | WOOD > SON                   |          |
| MAXYMIW        | Mon, Jul 7, 2003  | AM Monday        | <u>vacation TTH</u>    | WOOD                         |          |
| MAXYMIW        | Tue, Jul 8, 2003  | PM Tuesday       | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| MAXYMIW        | Wed, Jul 9, 2003  | AM Wednesday     | <u>vacation TTH</u>    | WOOD; session now closed     |          |
| MAXYMIW        | Thu, Jul 10, 2003 | AM & PM Thursday | <u>vacation TTH</u>    | CLOSED SESSION               |          |
| MAXYMIW        | Fri, Jul 11, 2003 | AM Friday        | <u>vacation TTH</u>    | WOOD                         |          |
| MAXYMIW        | Tue, Aug 5, 2003  | PM Tuesday       | <u>unpaid vacation</u> | CLOSED SESSION               |          |
| MAXYMIW        | Wed, Aug 6, 2003  | PM Wednesday     | <u>unpaid vacation</u> | CLOSED SESSION               |          |
| MAXYMIW        | Wed, Aug 6, 2003  | AM Wednesday     | <u>unpaid vacation</u> | BURGESS Add 3.5 hours to TCS |          |
| MAXYMIW        | Wed, Aug 6, 2003  | PM Wednesday     | <u>unpaid vacation</u> | WOOD                         |          |
| MAXYMIW        | Thu, Aug 7, 2003  | AM Thursday      | <u>Admin time</u>      | NOT IN CLINIC                |          |
| MAXYMIW        | Thu, Aug 7, 2003  | PM Thursday      | <u>Admin time</u>      | NOT IN CLINIC                |          |

Sample research/admin database

Browse

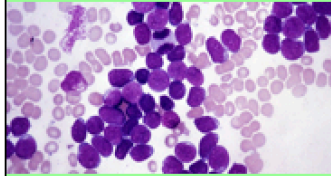
Layout: ALL AML

Record: 168

Total: 168

Unsorted

# PMCC LEUKEMIA DENTAL SCREENING DATABASE



CONSULT DATE

MRN

DIAGNOSIS

SURNAME

GIVEN NAME

CONTACT PHONE NUMBER

NUMBER OF TEETH

REGULAR DENTAL CARE

LAST DENTAL VISIT IN MONTHS

ORAL DENTAL PAIN

ORAL BLEEDING

LOOSE TEETH

PERCUSSION SENSITIVITY ANY TEETH

GINGIVAL INFILTRATE

VISIBLE ORAL PETICHIAE

ACUTE ORAL INFECTIONS

GLOBAL ASSESSMENT GINGIVAL HEALTH

GLOBAL ASSESSMENT ORAL HYGIENE

GLOBAL CARIES ASSESSMENT

ALL GLOBAL ASSESSMENTS SHOULD BE SCALED 1 TO 100 WITH 1 BEING NONE AND 100 BEING THE MOST SEVERE

COMMENTS

Blasts?

WBC count

Platelet count

HgB count

Counts suitable for dental treatment

**NEEDS POST REMISSION DENTAL APPT**



Sample comprehensive database

Patient Database (Dental Server)

Find

Layout: PATIENT

Request: 1

Total: 1

Omit

Symbol

Find

Main Menu
Sort
Find
New
Print
Delete
Back
Forward
Request image review
AML / ALL

UNIT COORDINATOR
Imaging reports
Bisp Table

DOB: \_\_\_\_\_ OHN: \_\_\_\_\_ CONSULTATION DATE: \_\_\_\_\_ FIRST NAME: \_\_\_\_\_ SEX: \_\_\_\_\_ Age at consult: \_\_\_\_\_

PATIENTS STATUS: \_\_\_\_\_ Q. I. \_\_\_\_\_ Current age: \_\_\_\_\_

HOME PHONE: \_\_\_\_\_ BUSINESS PHONE: \_\_\_\_\_ PAYMENT OPTIONS: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ Language spoken: \_\_\_\_\_ RESPONSIBLE DENTIST: \_\_\_\_\_

STAFF PHYSICIAN: \_\_\_\_\_ Infectious Disease status: \_\_\_\_\_ Fall Risk: \_\_\_\_\_

HIV/HEP STATUS: \_\_\_\_\_ REFERRED DIRECT TO DENTISTRY FROM OUTSIDE PMH: \_\_\_\_\_

CHIP CLEARANCE STATUS: \_\_\_\_\_ INFORMED CONSENT: \_\_\_\_\_ Potential donor: \_\_\_\_\_

**PATIENT'S DIAGNOSIS, SITE AND TREATMENT** **PANELIPSE / IMAGING CONSULT ONLY**

DIAGNOSIS: \_\_\_\_\_ SIDE: \_\_\_\_\_ N: \_\_\_\_\_ M: \_\_\_\_\_

Cancer Site Group: \_\_\_\_\_ Bisphosphonate patient: \_\_\_\_\_ Dictation Code: \_\_\_\_\_

TREATMENT: \_\_\_\_\_ Date symptoms appeared: \_\_\_\_\_

Secondary Treatment: \_\_\_\_\_ Date of first consult: \_\_\_\_\_

ORAL MEDICINE  BMT  Diagnosed by: \_\_\_\_\_

**PRE CANCER DENTAL ASSESSMENT AND TREATMENT**

PATIENTS COMPLIMENT OF TEETH: \_\_\_\_\_ PATIENT'S TOOTH COMPLIMENT POST TREATMENT: \_\_\_\_\_

MEDICALLY COMPROMISED: \_\_\_\_\_ SYSTEM COMPROMISED: \_\_\_\_\_ ADDITIONAL SYSTEM COMPROMISED: \_\_\_\_\_

PATIENT IN STUDY: \_\_\_\_\_ STUDY NAME: \_\_\_\_\_ STUDY STATUS: \_\_\_\_\_

SURGERY TYPE: \_\_\_\_\_ DATE: \_\_\_\_\_ Fluoride Trays: \_\_\_\_\_

PRE CANCER THERAPY DENTAL TREATMENT

PRE DMFS *maximum 160 to include incisal edges*: \_\_\_\_\_

CPITN total score at consult: \_\_\_\_\_

CPITN severity: \_\_\_\_\_

Pre radiation MST at one minute: \_\_\_\_\_ Two minutes: \_\_\_\_\_ Three minutes: \_\_\_\_\_

Date radiation completed: \_\_\_\_\_

**Notes**

Location of dental chart: \_\_\_\_\_ Latest appointment date-(use script): \_\_\_\_\_

**POST CANCER TREATMENT**

Post radiation MST/DMFS assessment date: \_\_\_\_\_

POST DMFS *maximum 160 to include incisal edges*: \_\_\_\_\_

CPITN total score at twelve month post: \_\_\_\_\_

HISTORY OF SMOKING: \_\_\_\_\_ Medications: \_\_\_\_\_

NUMBER OF PACK YEARS: \_\_\_\_\_

Diabetes: \_\_\_\_\_ Date of Widened Perio ligament Space: \_\_\_\_\_

Patient referred to XRT late effects clinic: \_\_\_\_\_ Date of Osteoradionecrosis: \_\_\_\_\_

Date referred to late effects clinic: \_\_\_\_\_ Cause of ORN: \_\_\_\_\_

DMFS DIFFERENCE: \_\_\_\_\_ MST DIFFERENCE: \_\_\_\_\_ CPITN DIFFERENCE: \_\_\_\_\_

DATE OF APPEARANCE OF PRC: \_\_\_\_\_ DEGREE OF PRC: \_\_\_\_\_ *number of teeth*

POST CANCER TREATMENT COMPLICATIONS

POST CANCER THERAPY DENTAL CARE

Bisphosphonate study patient: \_\_\_\_\_

MOUTH CLINIC      MST

Location of dental chart: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Room: \_\_\_\_\_ Rm. Dentist: \_\_\_\_\_ Procedures: \_\_\_\_\_

Find Appointments

# One has to be careful....

[BMJ](#). 2003 Dec 20;327(7429):1459-61.

## **Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials.**

Smith GC<sup>1</sup>, Pell JP.

⊕ **Author information**

### **Abstract**

**OBJECTIVES:** To determine whether parachutes are effective in preventing major trauma related to gravitational challenge.

**DESIGN:** Systematic review of randomised controlled trials.

**DATA SOURCES:** Medline, Web of Science, Embase, and the Cochrane Library databases; appropriate internet sites and citation lists.

**STUDY SELECTION:** Studies showing the effects of using a parachute during free fall.

**MAIN OUTCOME MEASURE:** Death or major trauma, defined as an injury severity score > 15.

**RESULTS:** We were unable to identify any randomised controlled trials of parachute intervention.

**CONCLUSIONS:** As with many interventions intended to prevent ill health, the effectiveness of parachutes has not been subjected to rigorous evaluation by using randomised controlled trials. Advocates of evidence based medicine have criticised the adoption of interventions evaluated by using only observational data. We think that everyone might benefit if the most radical protagonists of evidence based medicine organised and participated in a double blind, randomised, placebo controlled, crossover trial of the parachute.

### **Republished in**

Parachute use to prevent death and major trauma related to gravitational challenge: systematic review of randomised controlled trials. [Int J Prosthodont. 2006]

**“Experts often possess more data than judgment”**  
~ Colin Powell