

THE DENTAL CLINICS OF NORTH AMERICA

Dent Clin N Am 46 (2002) 617-621

# Index

*Note:* Page numbers of article titles are in **boldface** type.

Application service providers, in dentistry, 477–491

Case simulation programs, interactive, 577

CASE STUDIES for Dentistry, 577-581

future of, 601-602

Computer(s), clinical decision making using, 521-538

dental patient and, 522-523

for clinical decision making, 529-530

for diagnostics, 525-527, 529

for patient history and dental record, 523-524

for treatment planning and pretreatment, 527–529

handheld, applications of, 545–548

dental applications of, 548-551

description of, 539-540

features of, 540-545

in dentistry, 539-551

softwear for, 546, 548-551

Dental Lexi-Drugs, 549

Dentalog, 549

DocAlert, 548

ePocrates OID, 548

ePocrates qRx, 548

Five-minute Clinical Consult, 549

Palm Corporate Dental Application, 550

STAT growth charts, 550-551

in dentistry, 477-478, 565, 575-576

recommendations for, 530-532

Computer systems, office, application service providers, 481-482

benefits and drawbacks of, 482-486

examples of, 486-488

functions of vendor of, 489

security and, 489

hardware failures and, 480

network failures in, 480-481

operator error and, 479-480

0011-8532/02/\$ - see front matter © 2002, Elsevier Science (USA). All rights reserved. PII: S 0 0 1 1 - 8 5 3 2 ( 0 2 ) 0 0 0 3 7 - X

```
Computer systems (continued)
         power failures and, 480
         software failures and, 480
         traditional, 478–481
         type of Internet connection for, 488
Data integration, fundamental informatics principles and, 606-610
    meaning of, to practicing dentist, 605-615
    optimizing value of information in, 614-615
    transforming principles into practice, 610-614
Dental education, and continuing dental education, interactive multimedia patient
   simulations in, 575-587
    basic science made clinically relevant, 581-582
    clinical problem solving in, 582
    continuing, and dental education, interactive multimedia patient simulations in,
       575-587
         background of, 589-590
         education courses and listings, on Web, 591
         emerging Web technologies, 600-601
         on World Wide Web. 589-604
             instructional quality of, 592-595
         quality course review and, 596-600
         Web-based, location of, 590-592
    creation of standardized patients for, 583-584
    goal of, 576
    hard-to-find patients for, 582-583
    teaching of self-evaluation in, 584
    transfer problem in, 576-577
Dentist, practicing, meaning of data integration to, 605-615
DICOM standard, advantages of, 566-567
    as accepted standard, 566
    committee, 568
    conformance statement of, 568-569
    description of, 566
    in dentistry, American Dental Association and, 569-570
         practical demonstrations of, 570-571
         use and implication of, 565-573
    in perspective, 567
    latest version of, specialties supported by, 567–568
    parts of, 568
    streamlined, interoperability within, 571
             groups participating in, 572-573
```

Digital imaging and communication in medicine. See DICOM standard.

validation tests of, 571-572

Handheld computing. See Computer(s), handheld.

and dentistry, 555–556 areas covered by, 553–554

Health Insurance Portability and Accountability, 553-563

Department of Health and Human Services and, 553 electronic transaction standards and, 556-557

# Н

health care issues addressed by, 553 national employer identifier and, 562 national provider identifier and, 561 privacy rule of, 557-559 security and, 559-561 summary table, 554 Informatics principles, fundamental, data integration and, 606–610 Information management processes, 611, 612 Institute of Medicine, report of, patient simulations and, 585 Internet, advanced filtering and, 451, 452 Boolean keyword search and, 441, 442 catalogs and, 440, 441 current problems associated with, 458-459 genetic algorithms and, 460-461 InfoFinder agent and, 460 information and, need for, 436-437 retrieval of, 437 advanced concepts for, 442-459 basic concepts for, 438-441 versus knowledge, 437-438 information economics and, 459 information retrieval on, 435-462 intelligent agents and, 460 keyword search and, 440-441 knowledge management and, 437-438 meta search engines and, 449-451 natural-language queries and, 451, 453 newsgroup search and, 454 outlook for, 459-461 picture search and, 454, 456 ranking and matching criteria on, 445-447 ranking by relevance on, 447 search engine list, 446-447 search for personal conversation and, 457 search methods and, 440-441 search with special purpose search engine, 443-445

Internet (continued)
searchbots and, 454, 455
searching by example on, 448
semantic search engine and, 459–460
structure of, 435
traditional search engines and, 438–439, 473
type of connection for office computer systems, 488
WebWatcher project and, 460

## $\mathbf{M}$

Memex, 435

Multimedia patient simulations, interactive, in continuing dental education and dental education, 575–587

# o

```
Orthodontic referrals, via TeleDent Southwest, 507–520
background of, 507–509
capturing clinical data, clinical examination for, 510
images of models and radiographs for, 510
obtaining advice in, 511–513
comments on, 515–516
effect on dentists, 518
effect on patient care, 516–517, 518
method of, 509–510
results and discussion of, 513–514
cases referred, 514–515
process of referral, 514
use of equipment, 514
```

### P

```
Patient simulations, and accreditation standards, 585–587 in curriculum, 581 interactive, computer-based, 576–577 early in dental education, 582 report of Institute of Medicine and, 585

Practice system, information systems, 612, 613 integrated, 612, 613, 614 interfaced, 611, 612
```

### Т

TeleDent Southwest, orthodontic referrals via. See Orthodontic referrals, via TeleDent Southwest.

### TI

United Kingdom National Health Service, 507

### V

```
Virtual reality articular, adjustment of, preliminary and matching procedures for, 495–496
conception of, 495
DentCAM, 496–497
evaluation of, 497–498
modules of, 498–500
development of, in cooperation with Fraunhofer institute, 500–502
educational settings of, 502–504
in dentistry, 493–506
need for, 493–495
outlook for, 504–505
```

# W

```
Website(s), categories of information checklist, 465–466 companies and resources to help put online, 467–469 dental practice, 463–475 background of, 463 design of, guide to, 463–467 designing and maintaining own, 470 future of, in dentistry, 474 promotion of, 472–474 uses of, for dental practices, 470–472
```

World Wide Web, continuing dental education on, **589–604** search results, 590