

**Establishing an HIV/AIDS Pharmacy
Practice in an Underserved Inner
City Environment
Facilitators and Barriers**

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Baltimore Inner Harbor



Overview of Presentation

- Background
 - description of the health center and its programs
 - HIV epidemic in Baltimore
- Facilitators of care: access to medications
 - funding streams
 - pharmacy services, revenues
- Barriers to care: medication non-adherence
 - Interdisciplinary programs to improve adherence

Chase Brexton Pharmacy

- Owned and operated by health center
- Serves its own patients exclusively
- Programs and services evolved with growth of health center and its interdisciplinary approach to patient care



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Chase Brexton Health Services: History and Scope of Care



- not-for-profit community health center
- located in Mt Vernon section in downtown Baltimore
- opened 1978, volunteer run STD clinic
- early 1980's, saw first cases of AIDS in Baltimore
- mid 1980's funded by AIDS Demonstration project
- mid 1980's CDC funded HIV testing and counseling

CBHS: Scope of Care



- late 1980's participated in AIDS clinical trials; offered primary care to HIV/AIDS pts
- 1989 CBHS self-incorporated, hired full time staff; expanded care to all those affected by HIV/AIDS
- offered additional services to meet needs for diverse pts:
 - addictions trt
 - women's health
 - mental health
 - case mgmt
 - nutrition
 - clinical research
 - legal assistance
 - consultations
- 1995 opened on-site pharmacy

CBHS: Scope of Care



- 1995 offered general primary care regardless of HIV status
- 1999 became federally qualified health center (FQHC) adding:
 - dental services
 - intensive patient addictions program
 - intensive case management
- 2002 ambulatory and mental health services accredited by JCAHO
- today... “one stop shop” approach to health care addressing multiple needs thru an integrated system of care

HIV/AIDS in Baltimore, Maryland

12/31/02

	<u>Maryland</u>	<u>Baltimore City</u>
Prevalent HIV/AIDS cases	26,286	13,195
HIV/AIDS prevalence rate	496.3	2,026.4
% of population with HIV/AIDS	0.49%	2.02%
AIDS incidence rate per 100,000 population	33	50*

*3rd highest for metropolitan areas nationwide

HIV(+) patients at CBHS

- 30% are HIV(+) (1400 patients)
- 400 patients are AIDS-defined
- 66% male
- 73% African American
- Self-reported risk factors:
 - Men who have sex with men (MSM) 27%
 - Intravenous drug use (IVDU) 21%
 - MSM/IVDU 2%
 - Heterosexual 22%
 - Unknown 27%



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Access to HIV Drugs at CBHS: Facilitators of Care



Maryland Medicaid Program

- Federally funded
 - to all states (benefits determined by each state)
- Eligible patients in Maryland
 - those at or below federal poverty level (income \leq \$500/mo)
 - certified unable to work for at least one year
- Provisions
 - all medical care covered
 - most prescription drugs, many non-prescription drugs covered
- Medicaid Managed Care Organizations (MCO's)
 - most Medicaid patients required to enroll in MCO
 - covers all medical care excluding mental health services



Capitation for HIV/AIDS Patients in Medicaid MCO

- HIV(+) and AIDS patients at CBHS are risk-managed* by Medicaid MCO
- CBHS receives predetermined fee paid by MCO to provide comprehensive care for HIV/AIDS (including all medications)
- Capitation fees per month
 - \$1600 for HIV(+)
 - \$2600 for AIDS-defined
- Pharmacy expenses average \$1000 per month for HIV/AIDS patients
 - 40% of health care costs for risk-managed patients

**risk-managed:*

Spend less than capitation fee? Keep the difference.

Spend more than capitation fee? Pay the difference back to Medicaid MCO.



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Maryland Pharmacy Assistance Program

- Federal program, co-funded by states
- Eligible patients
 - income \leq \$900/mo
 - pharmacy only (does not cover medical care)
 - covers nearly all prescription and some non-prescription drugs
 - patients responsible for co-pays (\$2.50 or \$7.50 per prescription)
- Maryland Primary Care
 - covers co-pays for patients unable to afford to pay
 - also covers doctors' visits, diabetes supplies

Maryland Pharmacy Discount Program

- State-funded program
- Eligible patients
 - income \leq \$1358 per month
- Provisions
 - covers 50% of retail price of prescription
 - patients responsible for rest of charges

Maryland Aids Drug Assistance Program (MADAP)

- Federal program: Ryan White Care Act
- Aids Drug Assistance Program (ADAP)
 - most important drug benefit of Care Act
- Eligible patients
 - annual income \leq \$36,000/yr (\$6000/mo)
- Provisions
 - covers 100% of 100 different medications*
 - no co-payment required
 - covers co-pays for eligible patients who have other insurance benefits

*all ARV's, OI prophylaxis; selected antibiotics, antiemetics, antidiarrheals, blood modifiers, antidepressants, antipsychotics, statins, interferon, ribavirin, metformin, etc.



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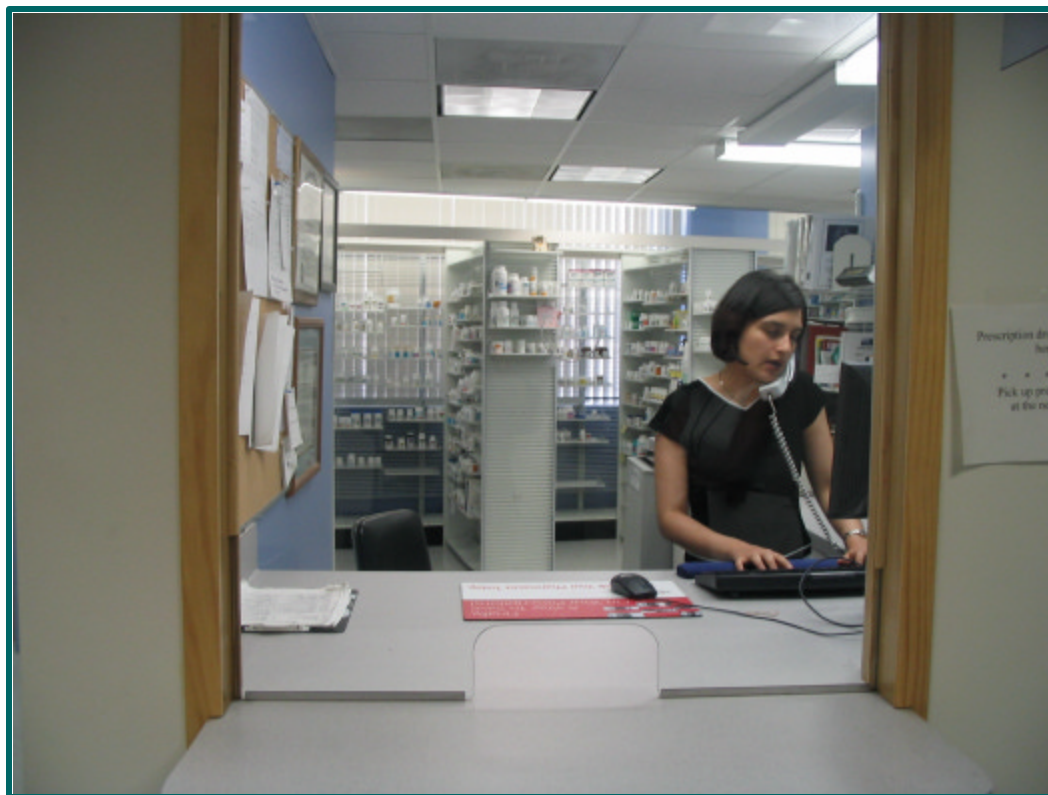
Pharmaceutical Manufacturers' Patient Assistance Programs (PAPs)

- Free medications provided by pharmaceutical manufacturers
- Eligible patients
 - Those without insurance coverage for medication
- Provisions
 - Supplies free medications (usually 3 month supply)
- Access to PAPs
 - CBHS pharmacist in conjunction with CBHS case manager coordinate efforts
 - paperwork submission
 - receipt and dispensing of medication to patient
 - re-ordering to ensure continuity of care



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Facilitators of Care: Establishment of On-Site Pharmacy



Decision to Open On-Site Pharmacy

- Convenience for patients
- Source of revenue for health center
 - 95% of prescriptions have guaranteed source of payment



Utilization of Pharmacy Services



- Original expectations for success were modest
 - located in 150 sq ft of space
 - few patients used the service
- Today (9 years later) exceeded our greatest expectations
 - relocated in 650 sq ft of space, excluding storage and patient waiting areas



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Utilization of Pharmacy Services: Prescription Drug Volume

- Approximately 95% of HIV(+) patients and 80% of HIV(-) patients use on-site pharmacy
- In May 2004, pharmacy served 954 different patients, of whom 509 were HIV(+)
- In May 2004, pharmacy filled over 5500 prescriptions, 70% of those were for HIV(+) patients
- More than half of these prescriptions for HIV(+) patients were for medical problems other than ARV or OI treatment or prophylaxis.

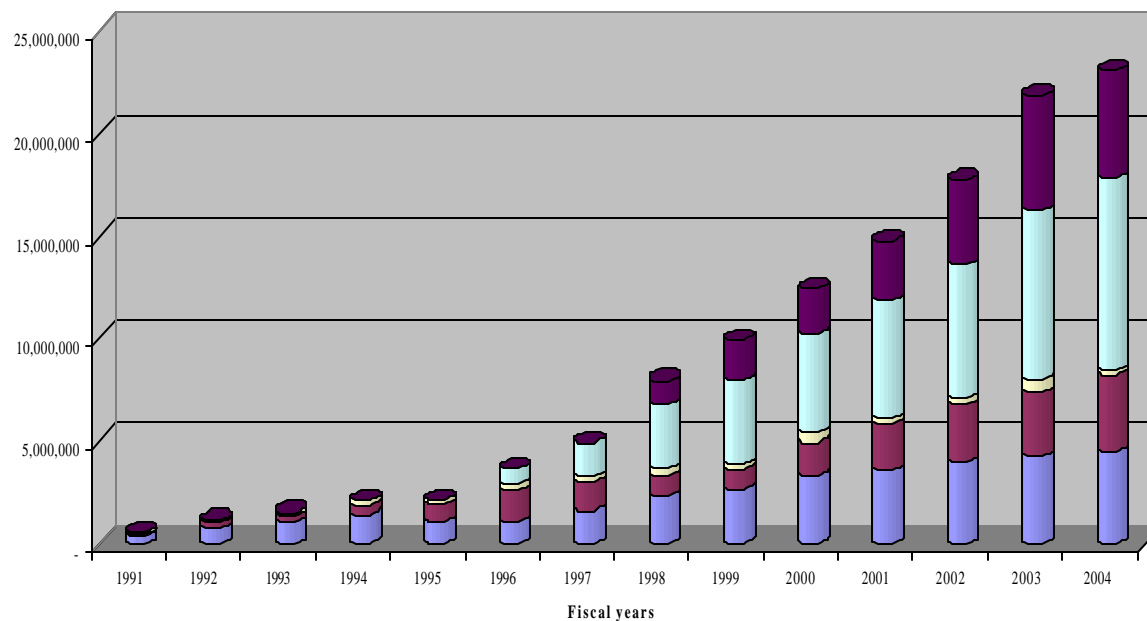
Utilization of Pharmacy Services: Pharmacy Revenues May '04

- Pharmacy claims generated revenues in excess of \$900,000.
- Average price per prescription was \$172.
- Revenue budgeted for FY 2005 \$10 million (represents 40% of health center's revenue)
 - gross profit 26%
 - net profit 10%



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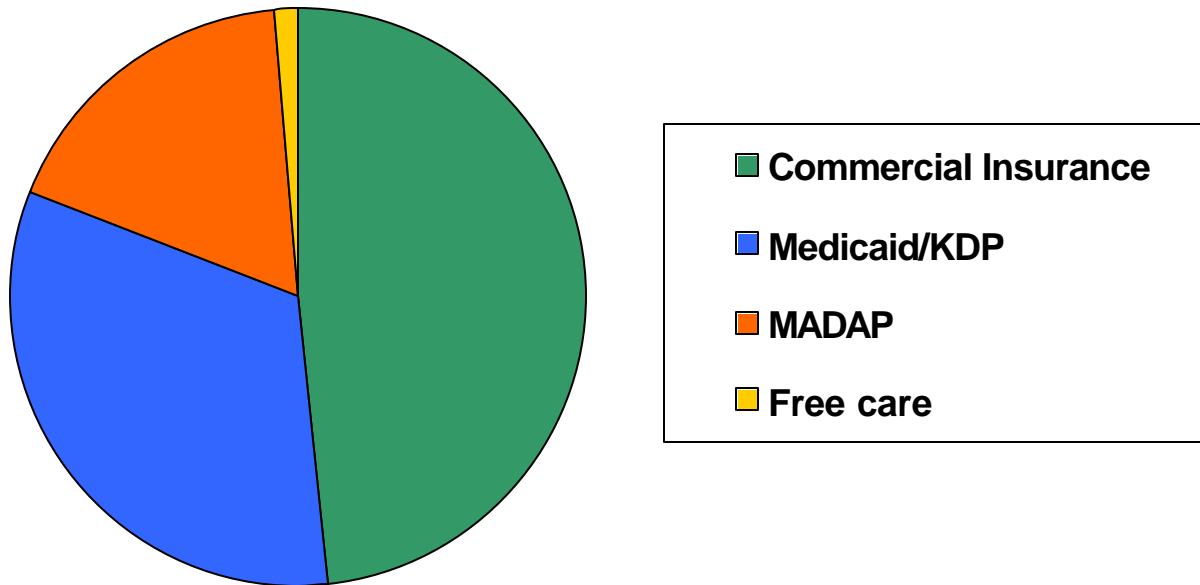
Pharmacy Revenue as a Percentage of Health Center's Revenues



Drug Purchasing for CBHS Pharmacy

- Medications purchased through local wholesalers or directly from manufacturers
 - Two different price structures for medication purchases
 - usual price negotiated through our retail pharmacy buying group
 - Discount price negotiated by federal gov't for community health centers, 40% less than usual prices
- *inventory purchased at usual price is used for prescriptions billed to any federal insurance program
- ** inventory purchased at discount price is used for prescriptions billed to all commercial insurance program, to cash customers, and to the health center itself

Payment Sources for Prescription Drugs



Pharmaceutical Care Services: Interdisciplinary Model

- Patients encouraged to use on-site pharmacy – convenience optimal!
- Providers & pharmacists working in same clinic areas – communications optimal!
 - Direct communication among disciplines
 - Electronic communication (medical record)



Accessing Pharmaceutical Care

Case 1

- Ms T, 39 yo recent immigrant, tested positive to HIV 2001, CD4 count <200, fungal infection, dermatologic problems, depression
- Unemployed, unable to work
- Following intake appt, pt referred to case mgr for needs assessment
- Pt deemed eligible for MADAP coverage for prescription drugs; applications completed and mailed within 3 days
- Treatment initiated immediately at initial visit for antifungal meds, OI prophylaxis meds and antidepressant using voucher (Ryan White grant funds) to cover meds until MADAP activated
- Medical expenses also covered by Ryan White funding



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Access to HIV Drugs at CBHS: Overcoming Barriers to Care



Medication Non-Adherence

- Psychological problems
- Social problems
- Addictions
- Health beliefs

HIV Adherence Program at CBHS

- Interdisciplinary team
 - Pharmacy
 - Medicine
 - Nursing
 - Case management
 - Addictions
 - Research
- All patients starting first regimen or change in regimen are referred to adherence program



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HIV Adherence Program: Nurse Educators

- Assess readiness to start medications
- Teach HIV basics
 - Viral load, CD4 count
 - How medications work
 - Concept of resistance
- Elicit information about patient's life style to determine best schedule for taking regimen, ability to adhere to regimen
- Elicit patient's perceptions about medications, side effects, health beliefs, disclosure of status



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HIV Adherence Program: Nurse Educators

- Reduce barriers to adherence
 - refer to mental health or addiction counselor prior to initiating ARV therapy
 - recommend that ARV therapy be postponed if pt unwilling to take meds
 - monitor OI prophylaxis medications use prior to initiating ARV treatment (to assess adherence)
 - set up medication schedules, provide calendars and pictures of each medication
 - teach patients how to fill weekly pill boxes



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HIV Adherence Program: Pharmacists

- Tracks medication pick up dates
- Refills medication one week before next pick up is due
- Synchronizes all medications (if possible) so that all medications can be picked up on monthly basis
- Phones patients to remind them that meds are due for pick up
- Ensures blood work is done at time of pick up
- Ensures that patients meet with case mgr or other staff if needed
- Contacts MST nurse or provider if patient is more than 2 weeks late for pick up before dispensing

HIV Adherence Program Pharmacists

- Monitor program “graduates”
 - Patients who have achieved VL <50 or best achievable goal VL
- Continue to track medication pick up, refill prospectively, make reminder phone calls
- Notify providers when patient is >2 weeks late for pick-up or adheres to protocols for late pick-up when provider not available
- Collect patient-specific data on 100 adherence graduates to assess ongoing adherence, knowledge of their regimens, management of side effects (results pending)

HIV Adherence Program

- Interdisciplinary team meet bi-weekly to discuss program logistics and specific patient problems
- All medical providers are strongly encouraged to refer patients to program
- Patients may refuse to participate
- CBHS program (1 of 12 programs nationally) to received 4 year grant from federal gov't to evaluate program effectiveness and to determine which interventions enhance adherence and improve outcomes
- Currently 138 pts in adherence program, 144 adherence “graduates”
- Since 1999, there have been > 600 patients in program



HIV Adherence Program

Pill Boxes



- Pill boxes
 - Filled weekly, biweekly, or monthly by pharmacy for patients who are unable to organize medications on their own
 - Pharmacy currently prepares med boxes for 15 patients



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HIV Adherence Program

“Club Med”

- Pharmacy prepares all medications in anticipation of bi-weekly meeting and synchronizes all meds to ensure adequate supplies for 2 weeks
- Biweekly support group for patients who cannot fill pill boxes independently but can do so in a group setting under supervision of nurse and mental health specialist
- Lunch is provided by a pharmaceutical company!



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HIV Adherence Program Directly Observed Therapy (DOT)

- Most intensive level of patient support
- Funded by City of Baltimore and private foundation
 - Patient advocates bring HIV meds directly to patients' homes once or twice a day, 7 days a week
 - Transports patients to medical appointments
- Medications prepared by pharmacy and packed into monthly pill boxes





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Clinical Collaboration: Pharmacist Role in Clinical Decision-Making

- Drug information
- Detailed information on prescription drug utilization
- Assist providers to obtain prior authorizations for medications
- Notify providers when patients do not pick up medications
- Notify case managers when insurance problems exist or are anticipated
- Attend weekly case conference meetings
- Serve triage function when patients report problems
- Provide patient counseling and medication teaching
- Serve on health center committees
- Play key role in strategic and tactical planning activities



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Conclusion

- Excellent access to medications for people with HIV disease in Maryland
- Because of financing mechanisms for prescription drugs in Maryland, pharmacy can generate revenue surpluses which support health center programs and services
- As pharmacists, our major challenge is focused on medication adherence. To this end, pharmacists work closely with colleagues from different disciplines at CBHS to develop innovative program that help patients achieve desired outcomes



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