

Launching of Continuous Quality Improvement for HIV/AIDS Care in Cambodia-Japan Friendship Hospital, BMC Province

July 19, 2011

**National Center for HIV/AIDS,
Dermatology and STDs**



CQI for CoC

What is CQI?

- **C = Continuous**
- **Q= Quality**
- **I= Improvement**

Continuous Quality Improvement

What is CoC?

- **C = Continuum**
- **o = of**
- **C = Care**

Continuum of Care

Background

- Before 2003; a few percentage of PLHA received ART mostly from NGOs, there was no National Guideline for ART yet;
- This becomes a concern. In 2003, MoH establish CoC to response to the need for care and treatment for people infected with HIV/AIDS;
- Five years later meaning in 2008; it is estimated that about 90% AIDS patients already received ART;
- What is the quality services provided to patients?
- HIV CQI would play important role in improving the quality services of HIV care

Background (cont.)

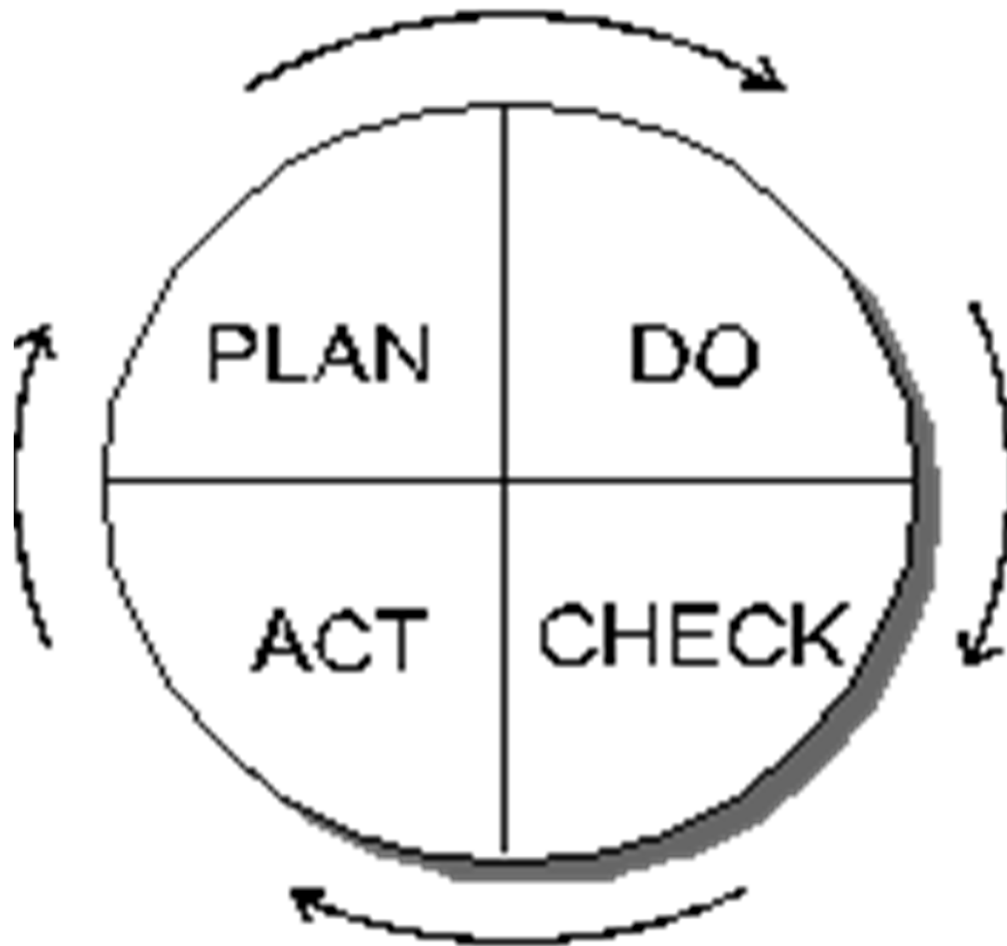
- This becomes another concern about the quality services provided to patients;
- In 2008, NCHADS in collaboration with UNAIDS, WHO, USCDC, and other concerned organizations to develop Standard Operation Procedure for CQI for Continuum of Care for HIV/AIDS in Cambodia in the hope that CQI would play important role in improving the quality services of HIV/AIDS care

Concept of CQI

- Deming and his colleague, Shewhart, promoted the **PDCA** cycle – mean that

Plan, Do, Check and Act.

The PDCA Cycle



Overall objective

- To improve the quality of care and treatment services provided to PLHA in Cambodia

Specific objectives

- To create a culture of continuous quality improvement among CoC team
- To improve communication between health care providers , data management team, community support teams and other related organizations in the CoC
- Capacity building for CoC team to manage CQI

Indicators of CQI for CoC

- **Mortality indicators: consists of 3 key indicators;**
- **Quality of service indicators: consists of 5 key indicators;**
- **Case-finding and prevention indicators: consists of 4 indicators**

Mortality indicators

- Percentage of patients under ART who died;
- Percentage of patients under ART who were lost to follow-up;
- Percentage of patients under OI who died or were lost to follow-up

Quality of service indicators

- Percentage of patients on ART who kept all appointments in the last quarter (post-ART);
- Percentage of patients with CD4<350 (CD4<250 before April 2010) or WHO stage4 who start ART within 60 days (pre-ART);
- Percentage of patients with CD4 counts less than 200 and 100 receiving prophylaxis with CXT and fluconazole respectively

Quality of service indicators (cont.)

- TB screening: Percentage of patients newly registered at the OI/ART site who were screened for TB (pre-ART);
- Percentage of patients on ART who are still on first line regimens after 12 or 24 months (post-ART)

Case-finding and prevention indicators

- Percentage of new OI patients with an initial CD4 count of >350 (CD4 <250 before April 2010);
- Percentage of new TB patients who receive HIV testing and counseling (TB)

Case-finding and prevention indicators (cont.)

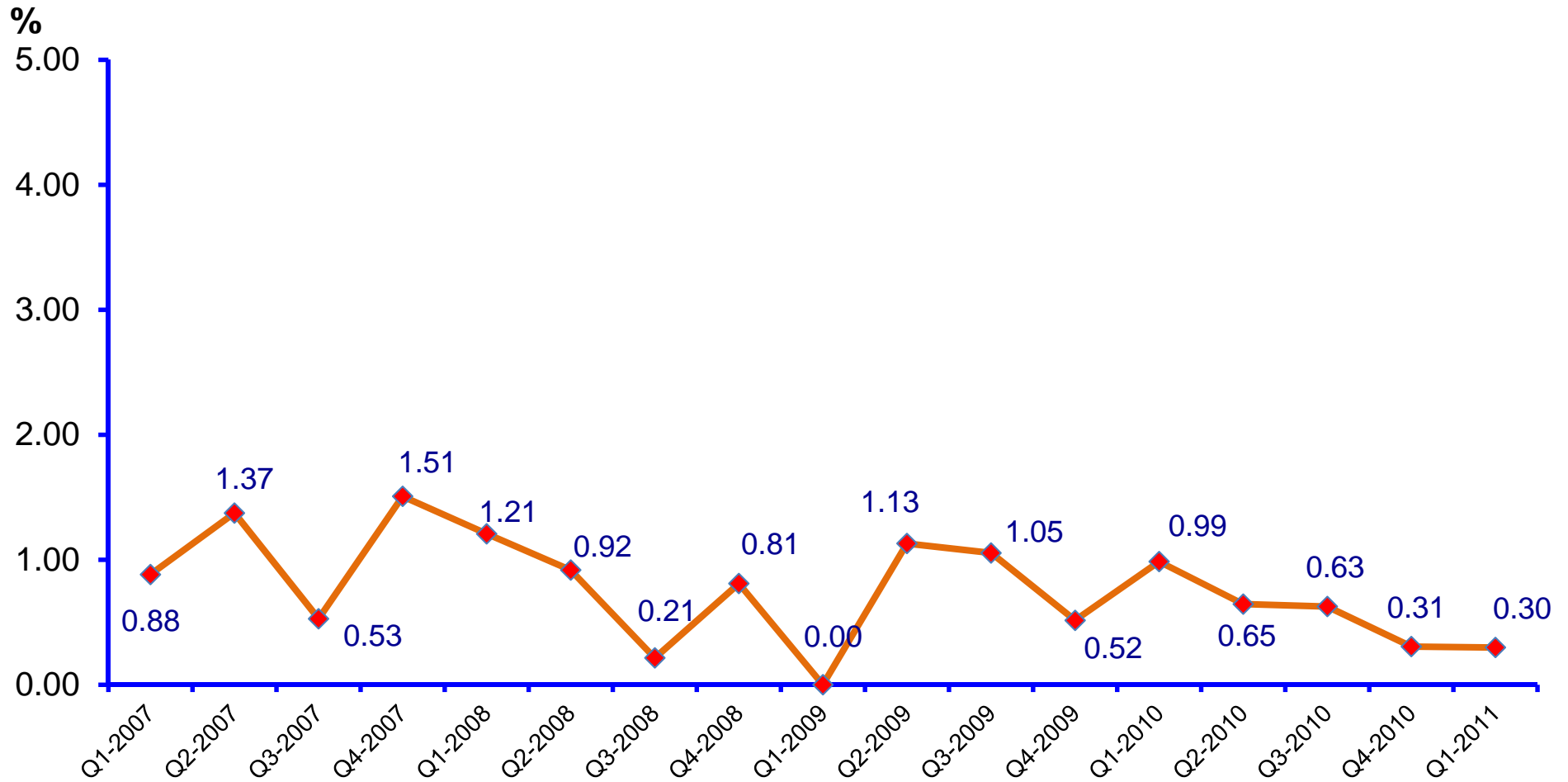
- Percentage of ANC1 patients who received HIV testing and counseling;
- Percentage of known HIV+ pregnant women who received prophylaxis (PMTCT).

FINDINGS

Percentage of adult patients under ART who died by quarter in CJF-RH

Numerator: Total number of patients known to have died during the quarter

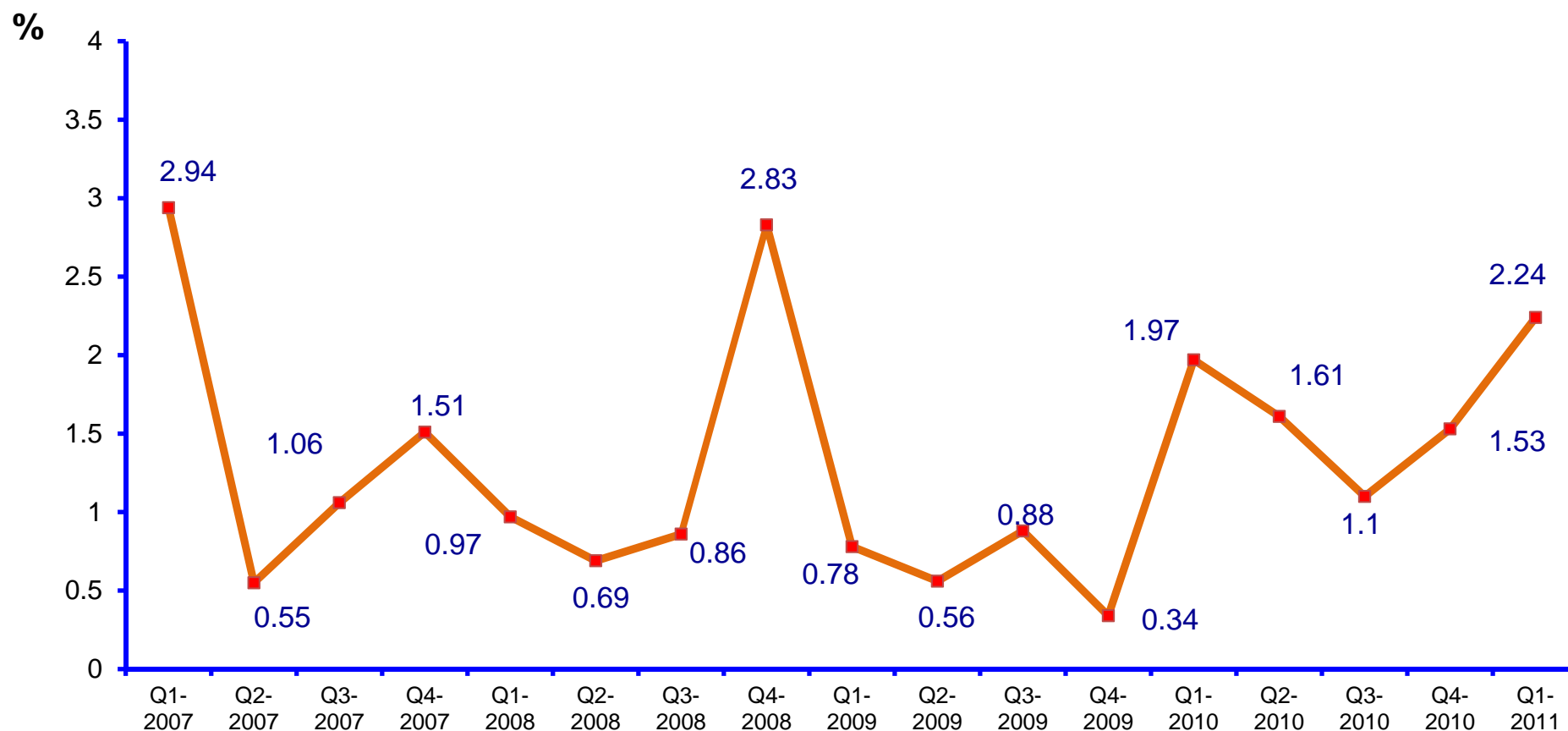
Denominator: Total number of active ART patients + total number of ART dead in the quarter



Percentage of adult patients under ART who were lost to follow-up by quarter in CJF-RH, BMC

Numerator: Total number of patients who were lost to follow up during the quarter. "Lost to follow up" is defined in the National ART Guidelines as lost for at least 3 months and not classified as dead, transferred out, or stopped ART.

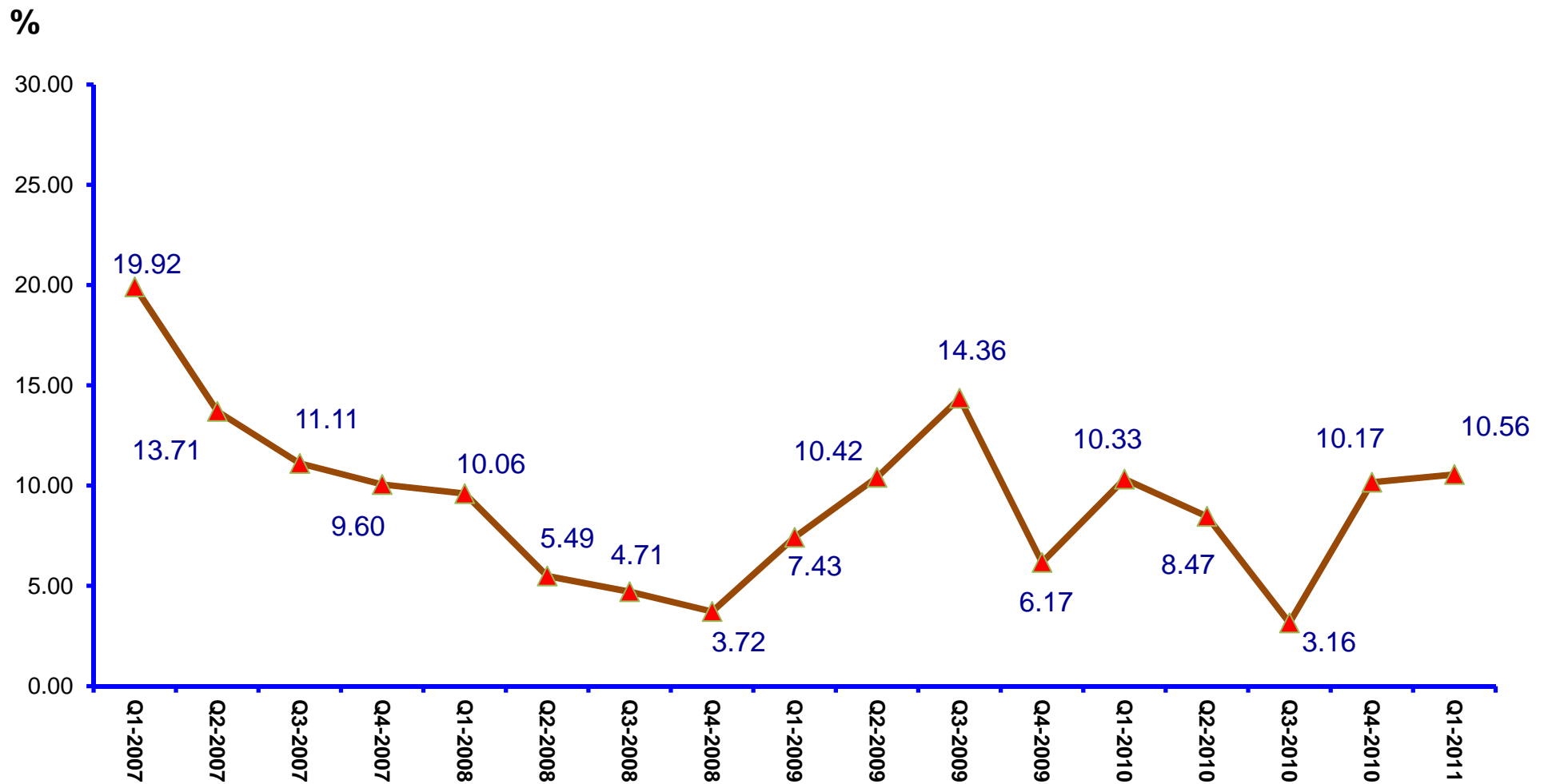
Denominator: Total number of active patients on ART at the end of the quarter + total number of patients who lost to follow up



Percentage of adult patients under OI who were lost to follow-up by quarter in CJF-RH, BMC

Numerator: Total number of OI patients who were lost (whether or not they are known to have died) during the quarter.

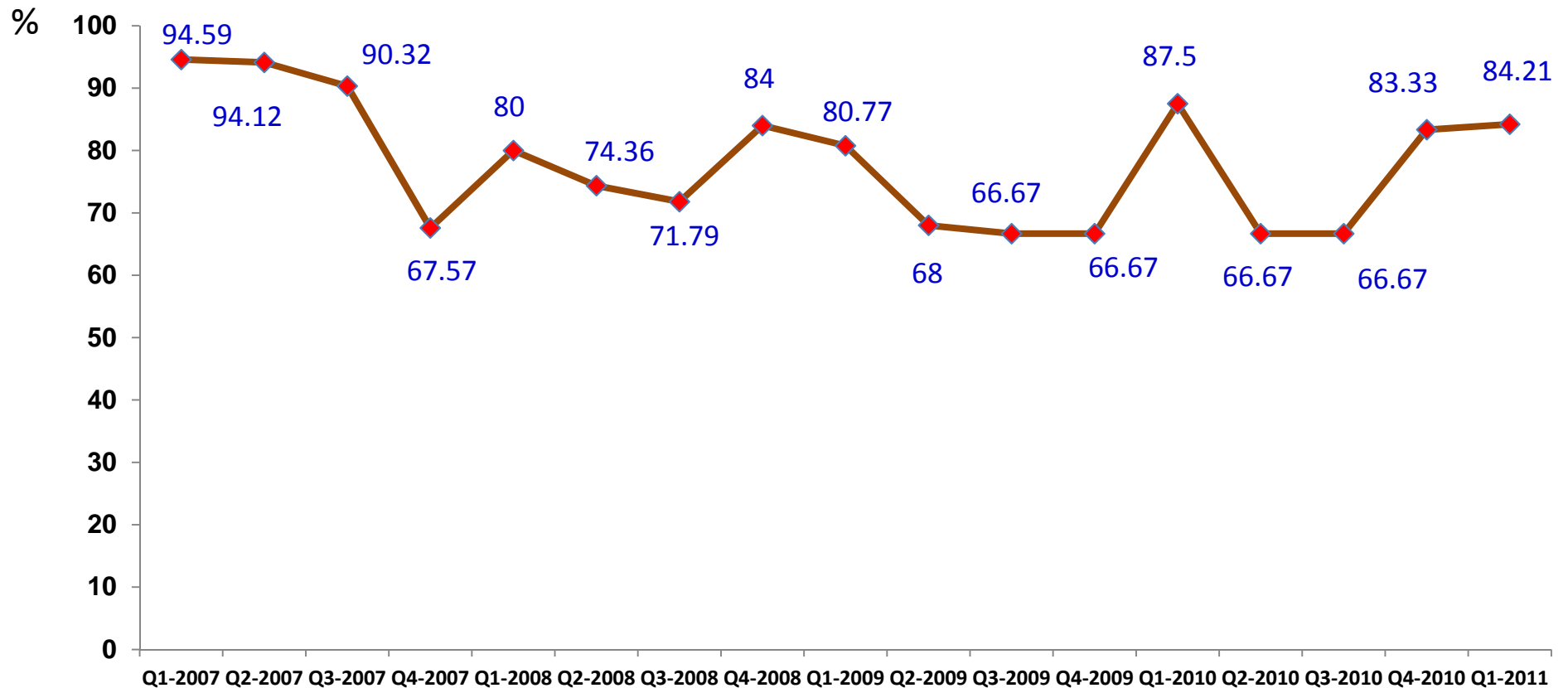
Denominator: Total number of active patients on OI at the end of the selected quarter + total number of OI patients who were lost during the quarter



Percentage of patients whose CD4<350 (CD4<250 before April 2010) or WHO stage 4 who start ART within 60 days after eligible in CJF-RH, BMC

Numerator: Number OI patients with a CD4 count of <250(350) or WHO stage 4 within the first month of the reporting quarter or the two months previous who start ART by 60 days

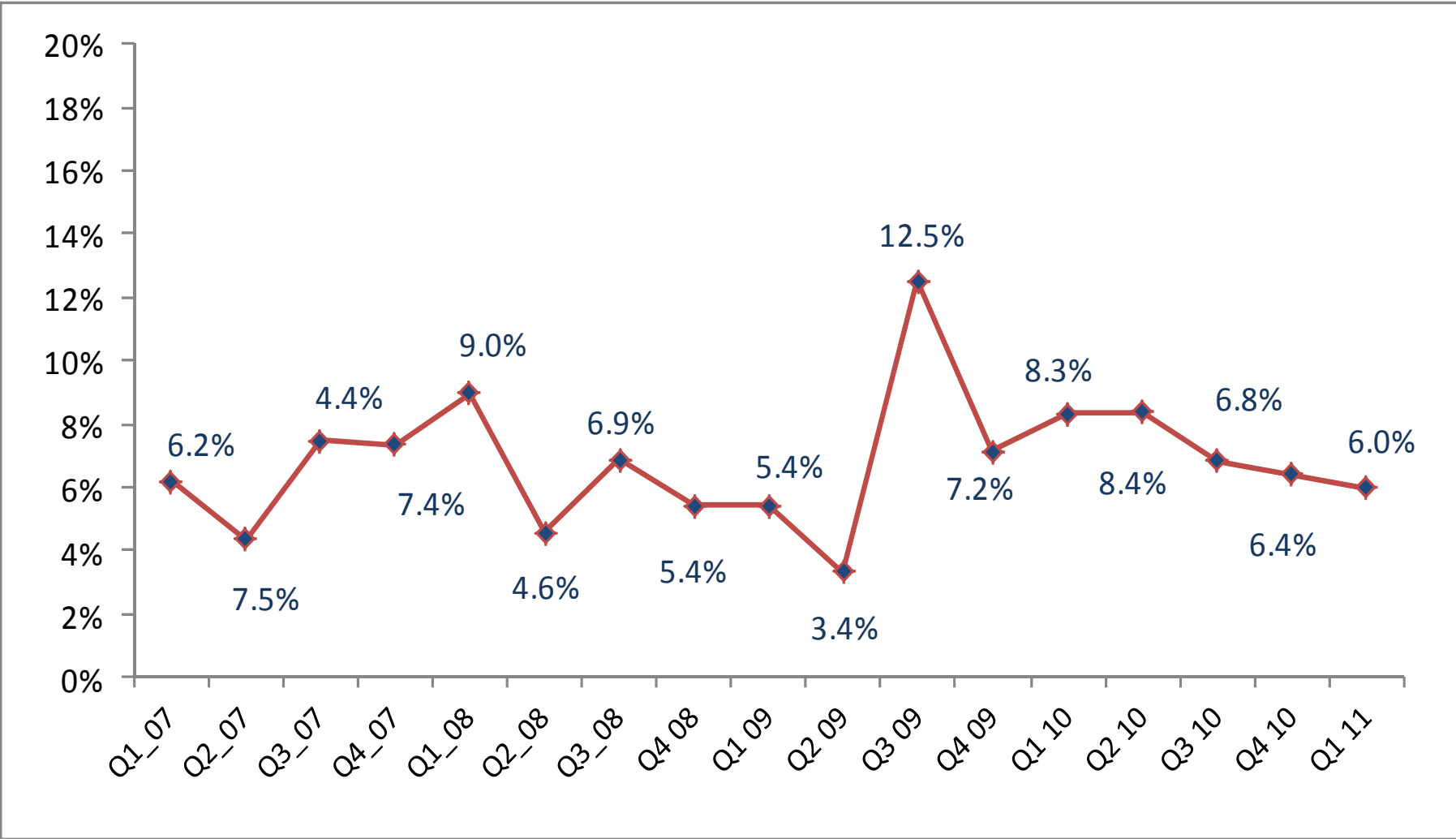
Denominator: Total number of OI patients with a CD4 count of <250(350) or WHO stage 4 within the first month of the reporting quarter or the two months previous.



Percentage of late visit beyond buffer by quarter in CJF-RH, BMC

Numerator = Number of Late Visits Beyond Buffer in the Quarter

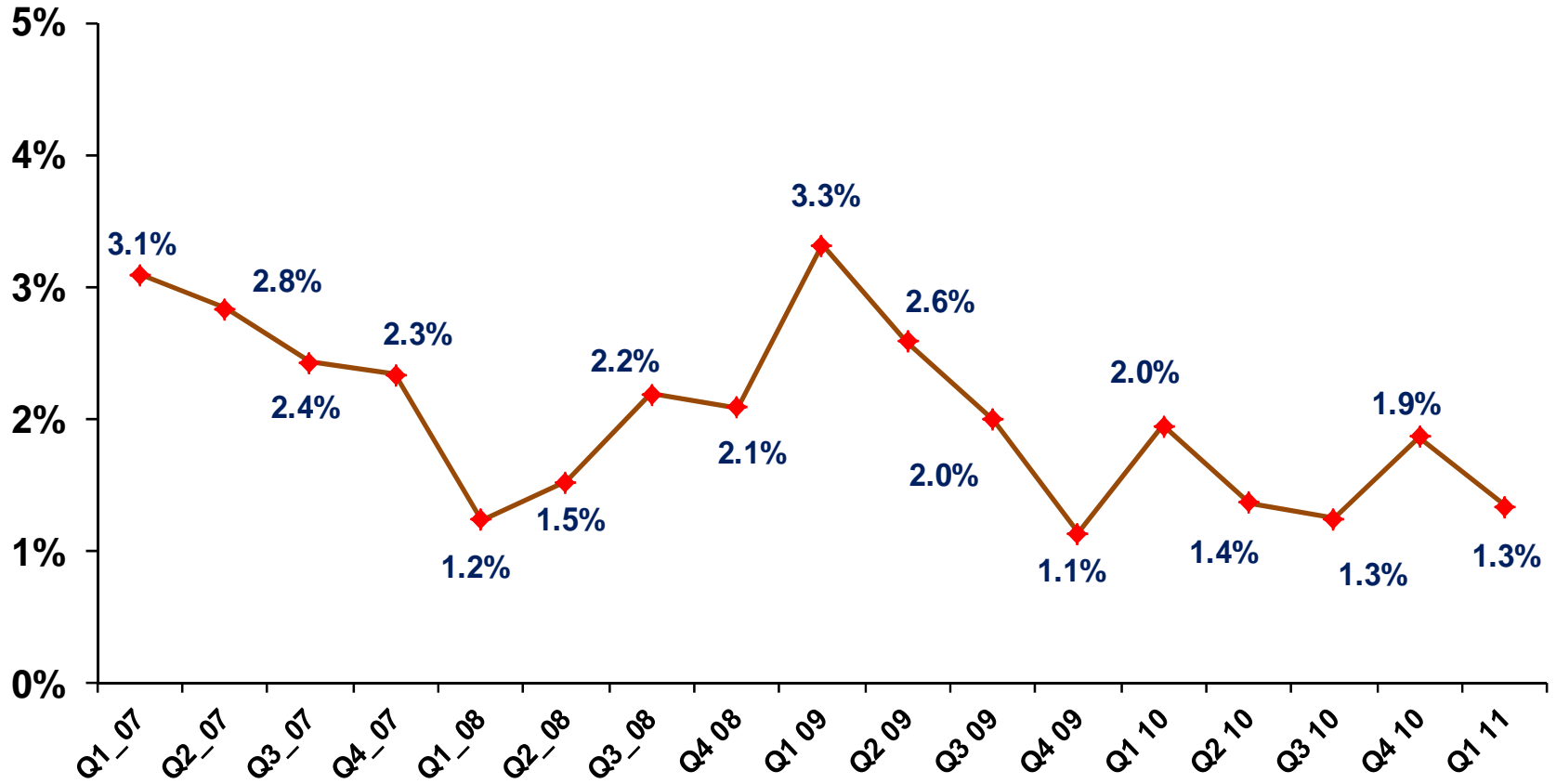
Denominator = Number of Total Visits in the Quarter



Percentage of late visit within buffer by quarter in CJF-RH, BMC

Numerator = Number of Late Visits in Buffer in the Quarter

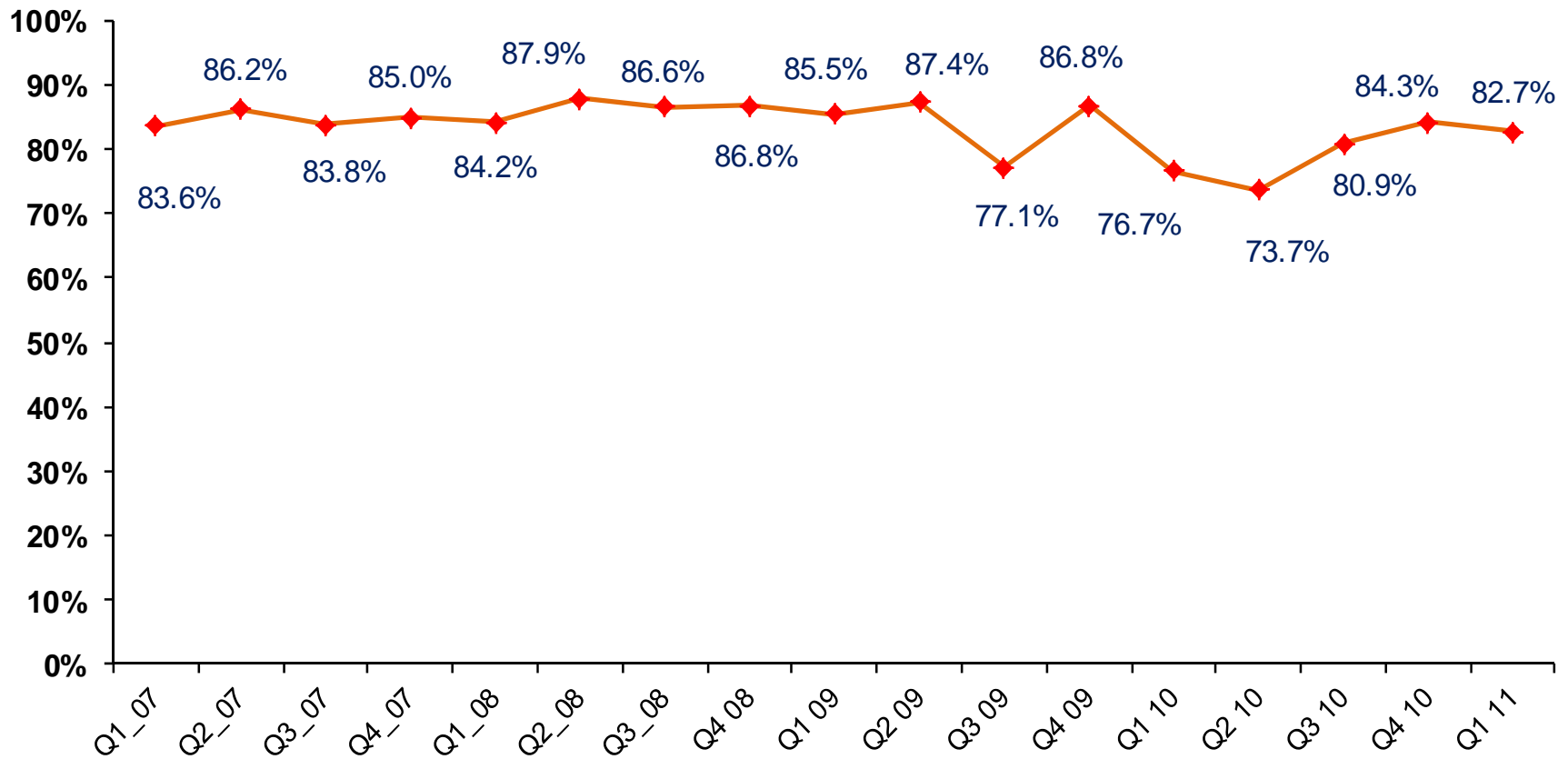
Denominator = Number of Total Visits in the Quarter



Percentage of visit exactly on schedule by quarter in CJF-RH,BMC

Numerator = Number of Visits Exactly in the Quarter

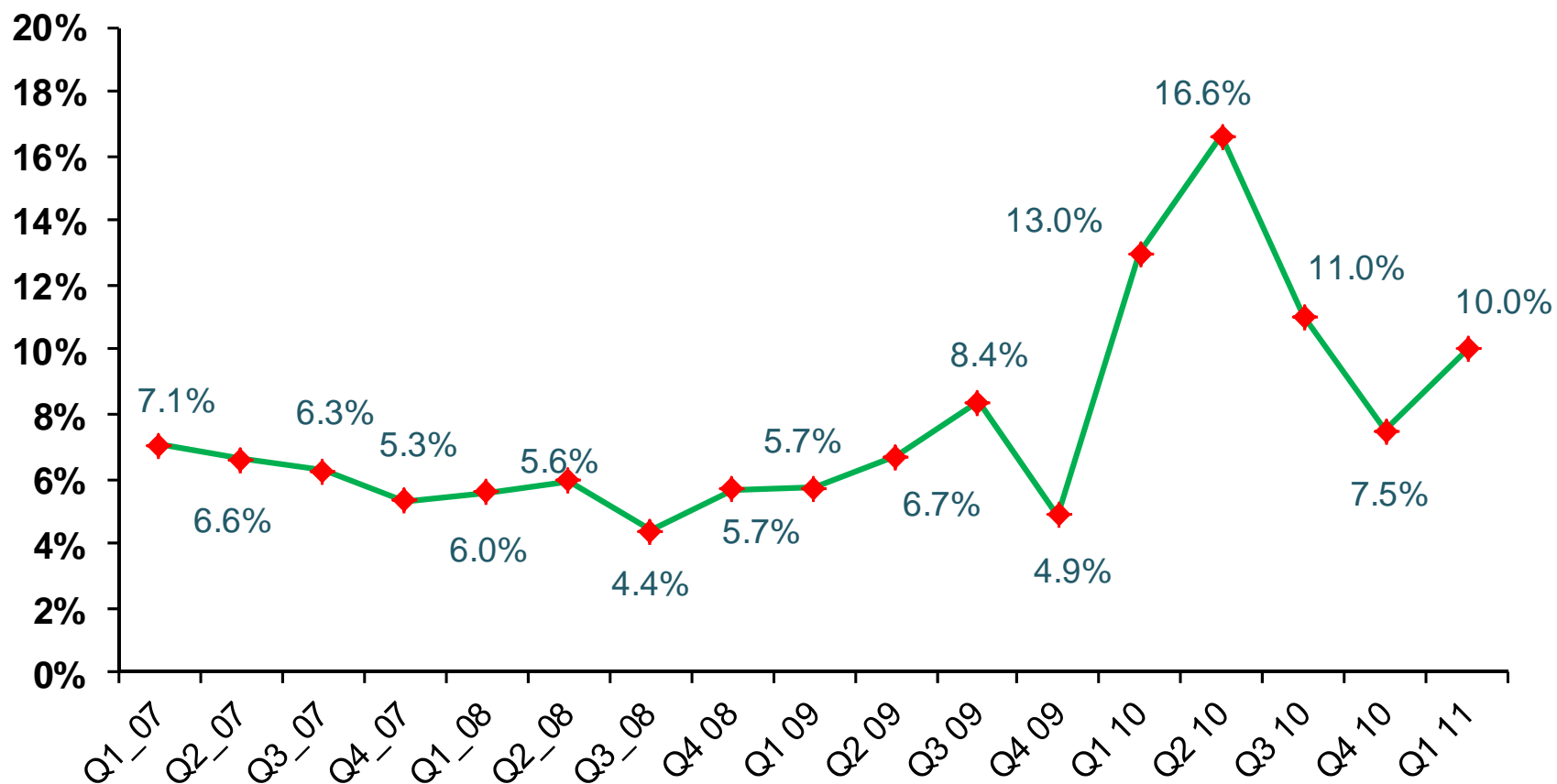
Denominator = Number of Total Visits in the Quarter



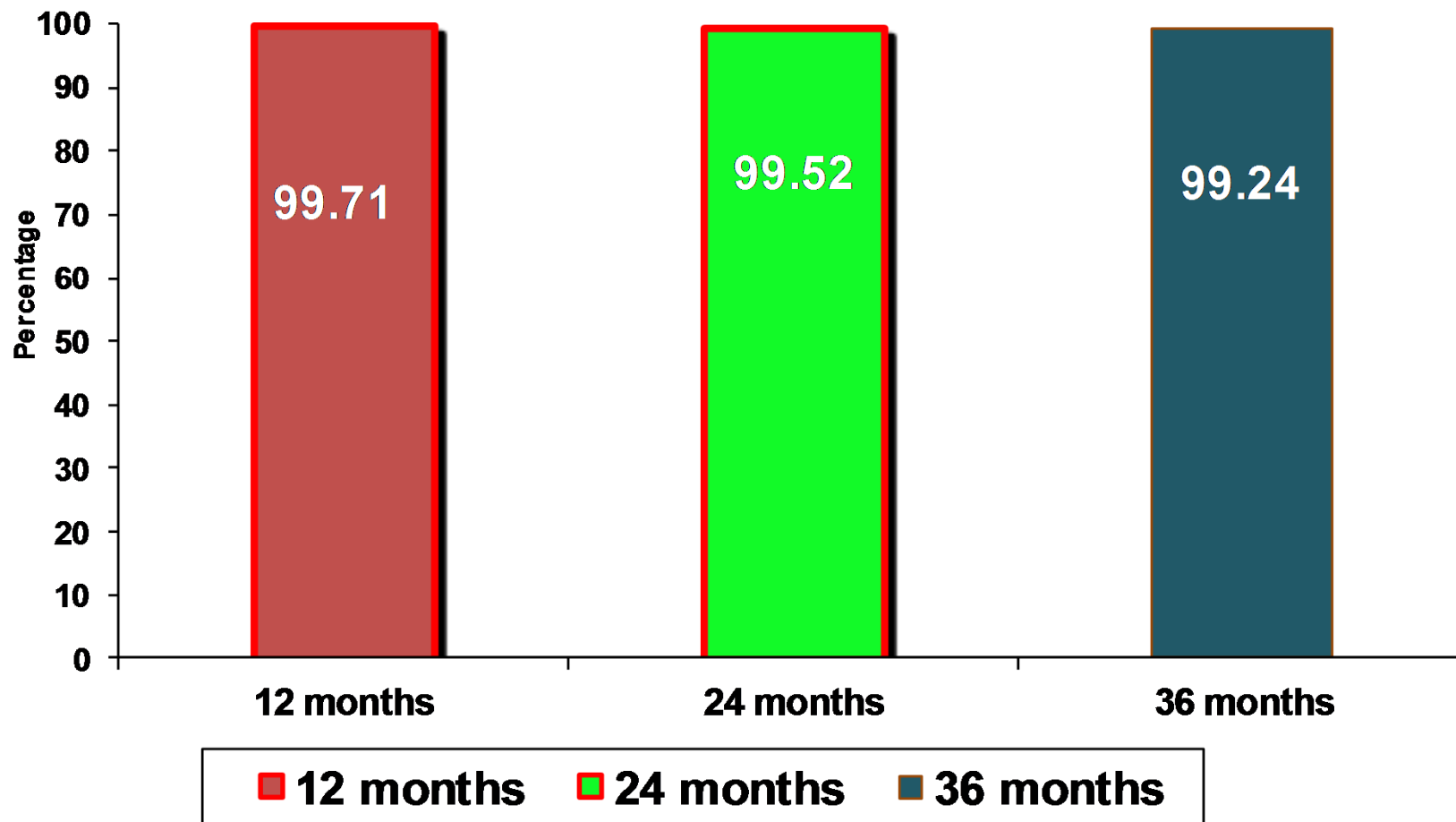
Percentage of early visit by quarter in CJF-RH, BMC

Numerator = Number of Early Visits in the Quarter

Denominator = Number of Total Visits in the Quarter



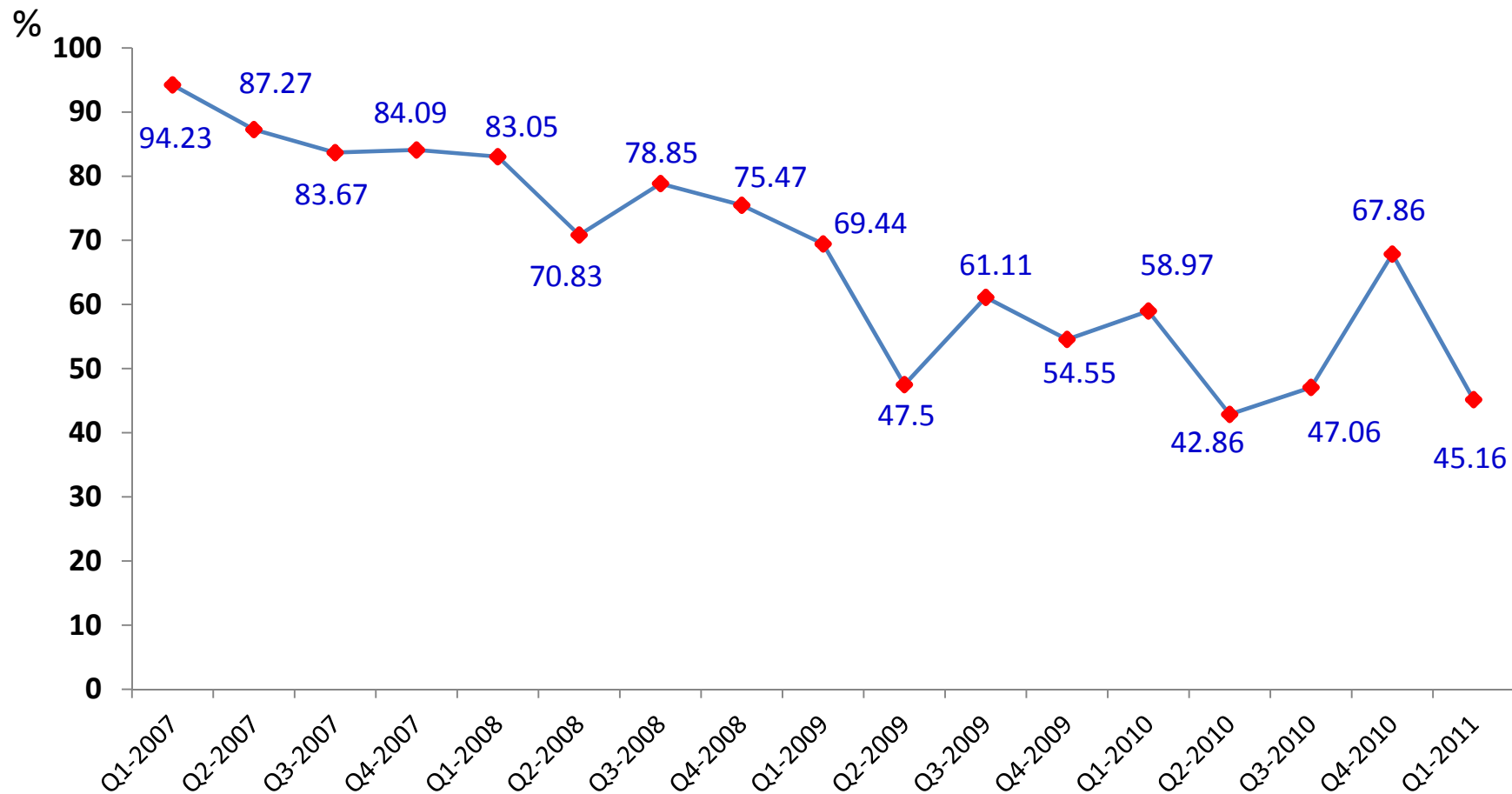
Percentage of patients on ART who are still on first line regimens after 12 months or 24 months or 36 months in CJF-RH, BMC



Percentage of Patients whose CD4<200 and received Cotrimoxazole by quarter in CJF-RH, BMC

Numerator: Number of OI/ART patients with most recent CD4 <200 and who receive a new or ongoing prescription for cotrimoxazole at the appointment following the date of the CD4 test (within the quarter)

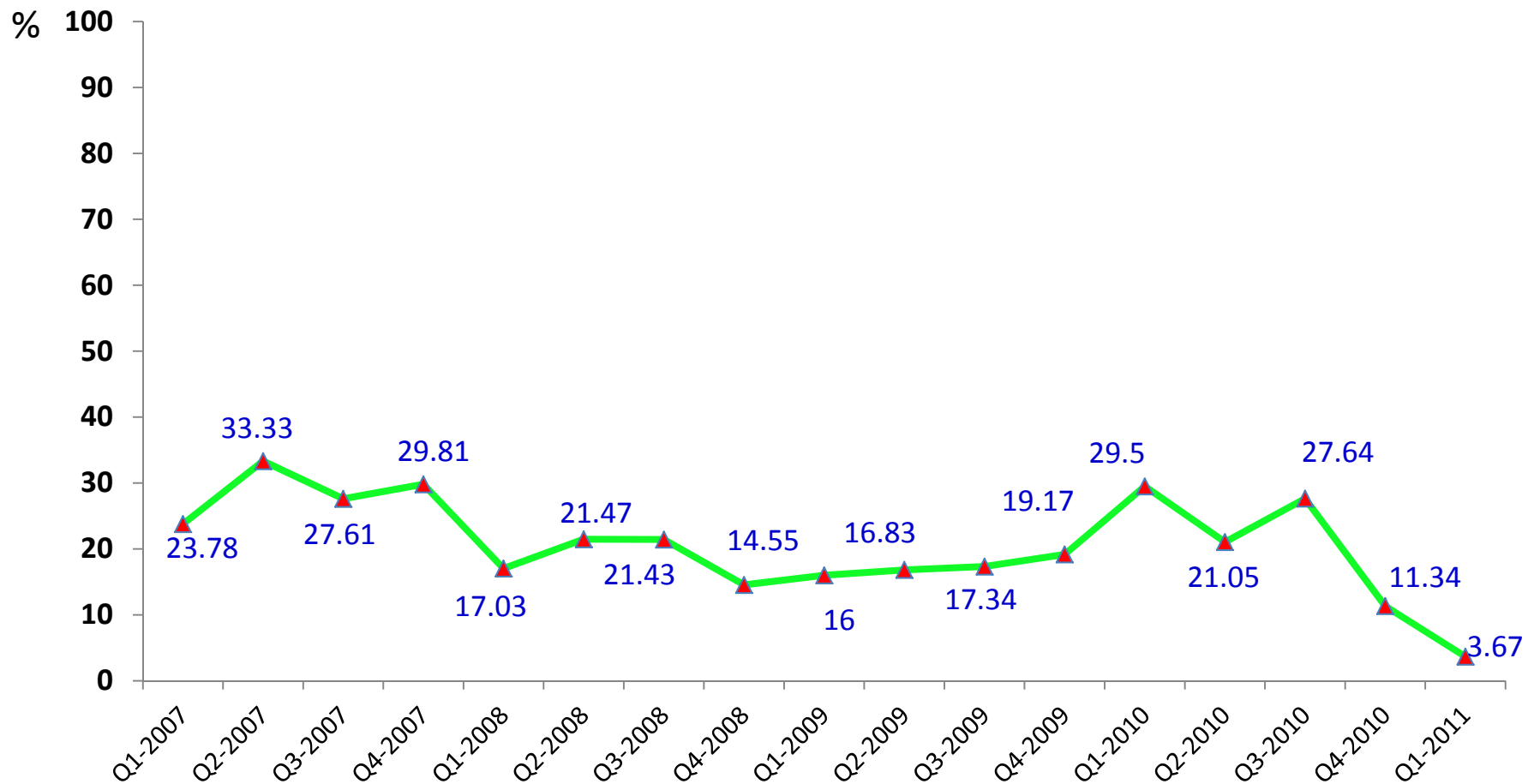
Denominator: All OI/ART patients with CD4 cell counts < 200 (within quarter)



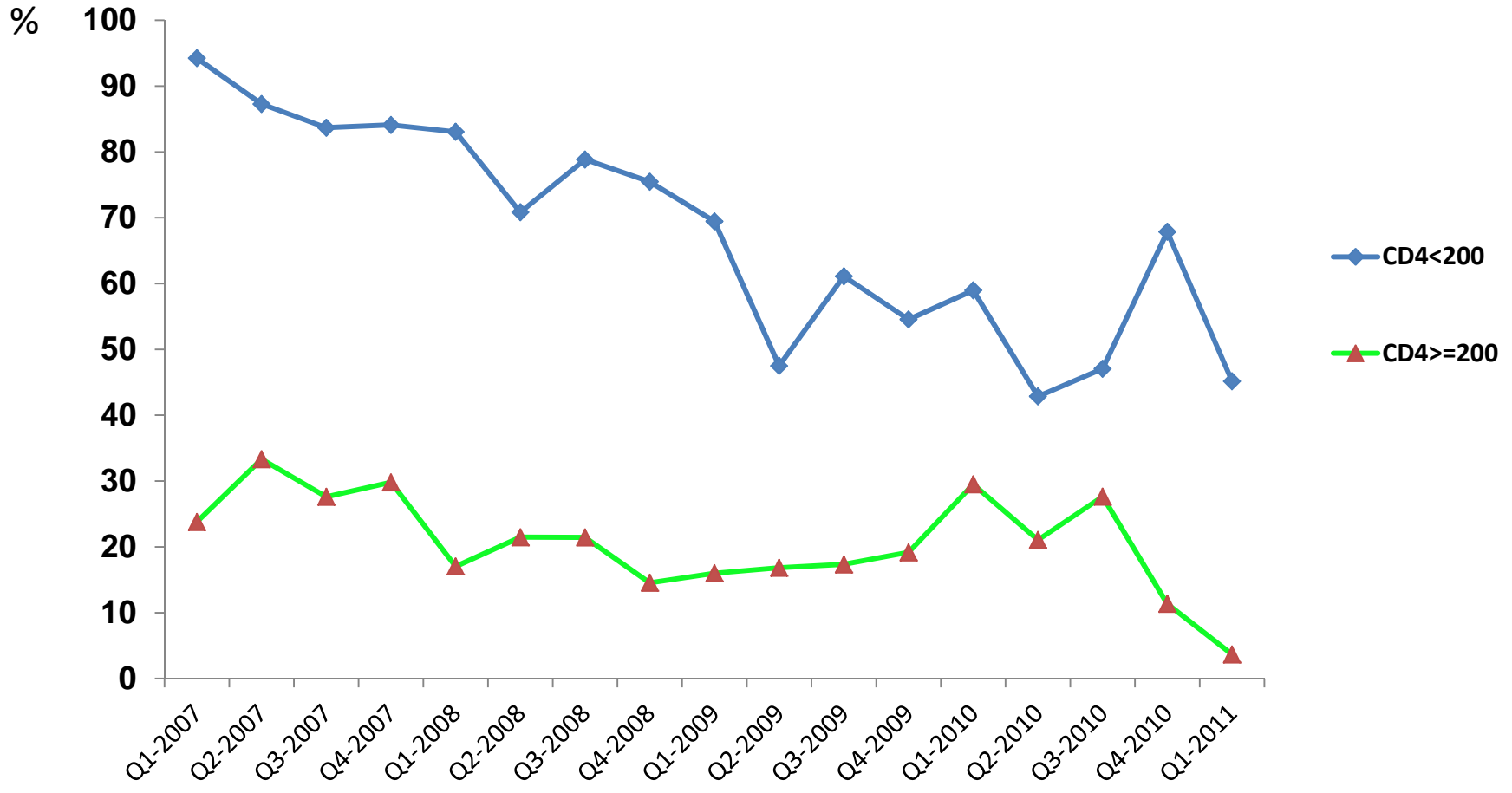
Percentage of Patients whose CD4 \geq 200 and received Cotrimoxazole by quarter in CJF-RH, BMC

Numerator: Number of OI/ART patients with most recent CD4 \geq 200 and who receive a new or ongoing prescription for cotrimoxazole at the appointment following the date of the CD4 test (within the quarter)

Denominator: All OI/ART patients with CD4 \geq 200 (within quarter)



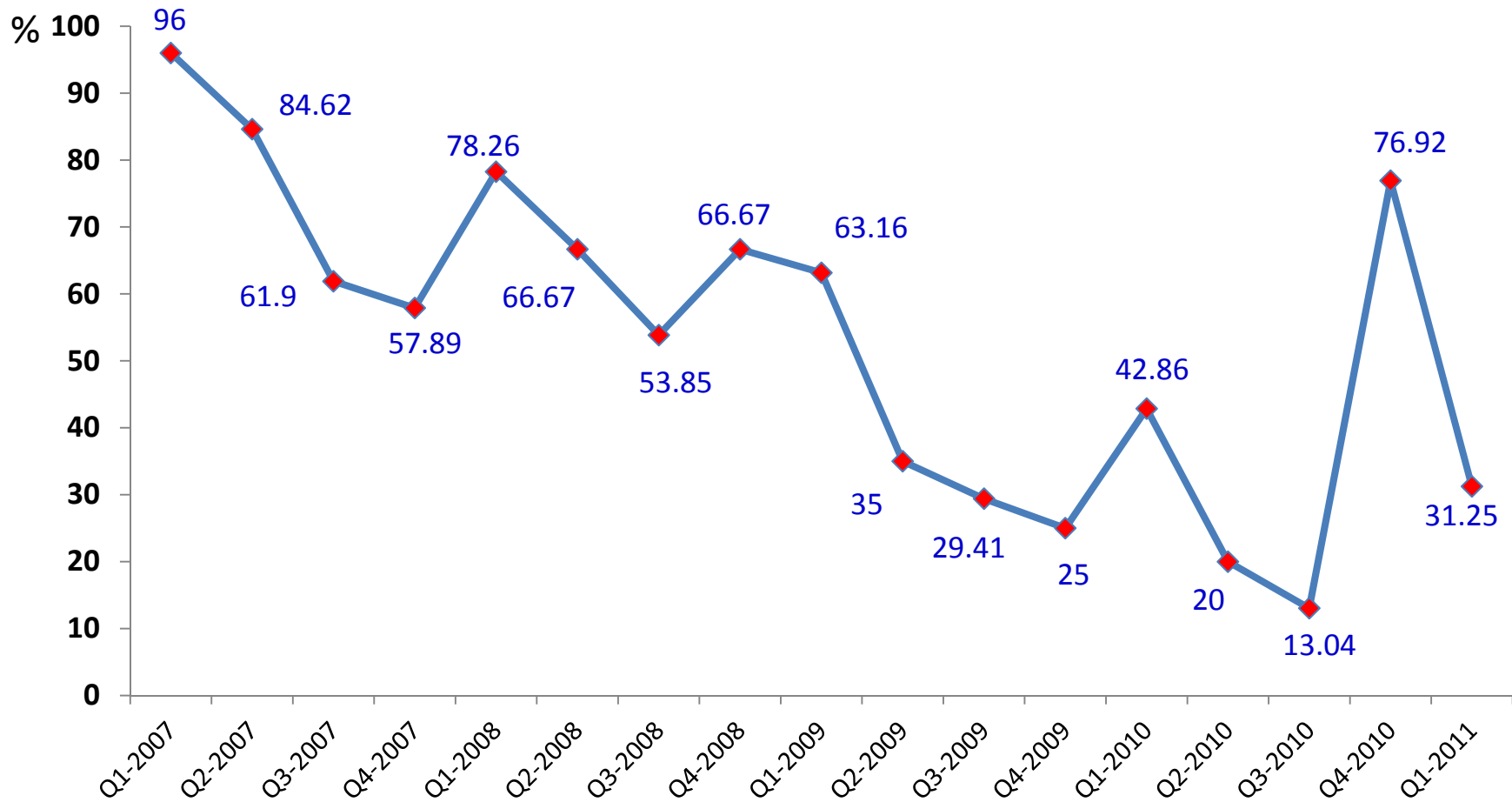
Percentage of Patients whose CD4<200 and CD4>=200 received Cotrimoxazole by quarter in CJF-RH, BMC



Percentage of Patients whose CD4<100 and received Fluconazole by quarter in CJF-RH, BMC

Numerator: Number of OI/ART patients with most recent CD4 <100 and who receive a new or ongoing prescription for Fluconazole at the appointment following the date of the CD4 test (within the quarter)

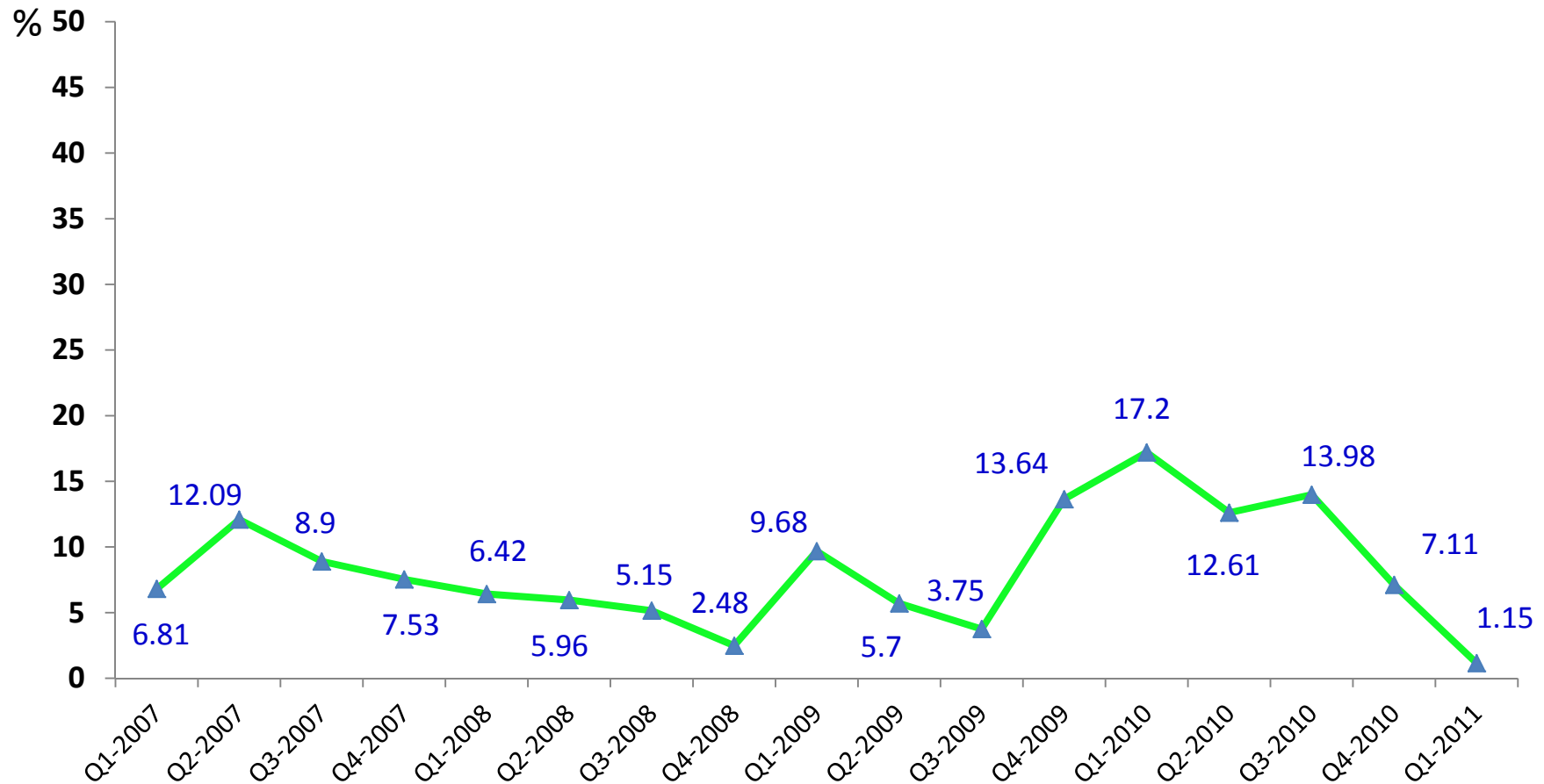
Denominator: All OI/ART patients with CD4 < 100 (within quarter)



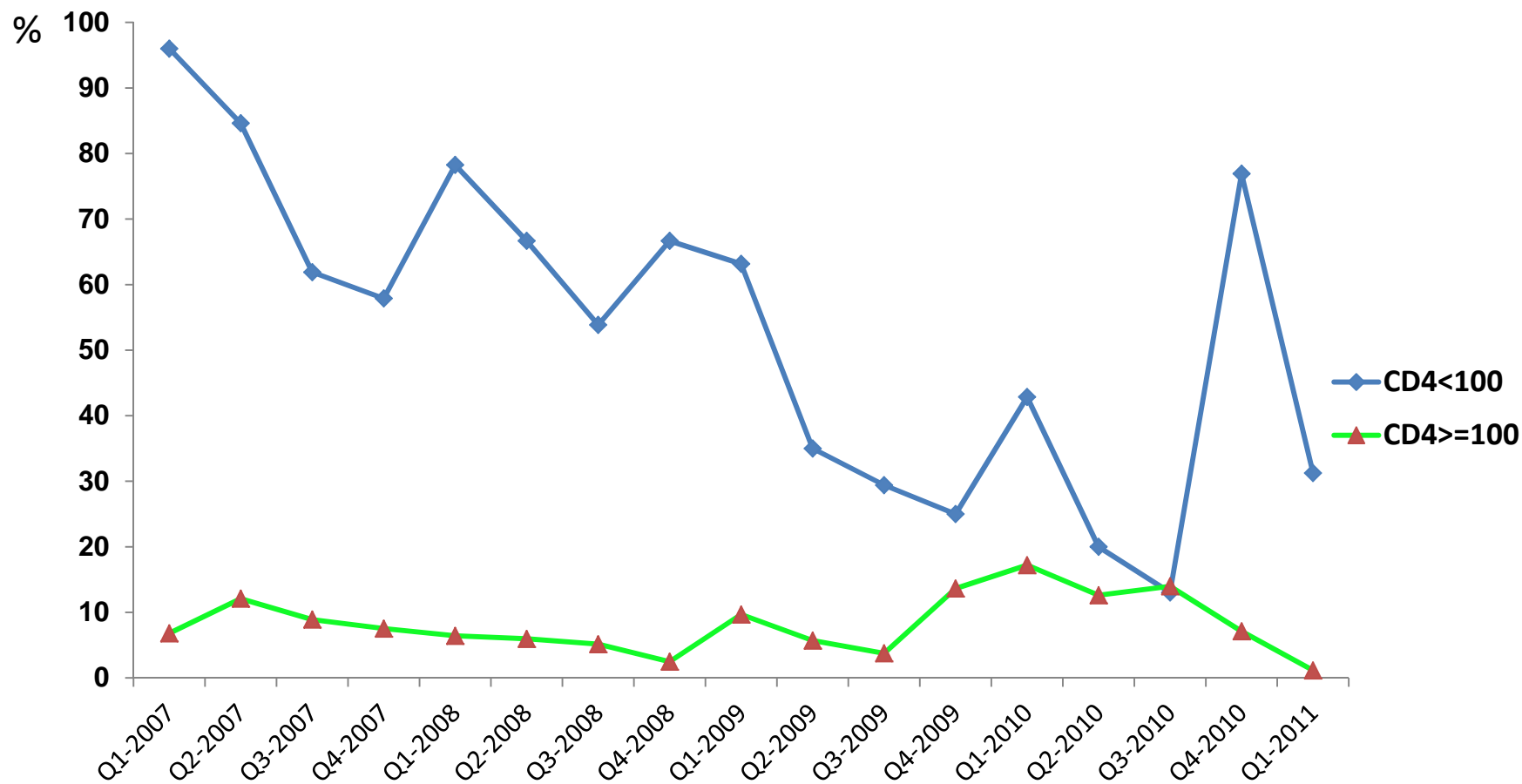
Percentage of Patients whose CD4 \geq 100 and received Fluconazole by quarter in CJF-RH, BMC

Numerator: Number of OI/ART patients with most recent CD4 levels of \geq 100 and who receive a new or ongoing prescription for Fluconazole at the appointment following the date of the CD4 test (within the quarter)

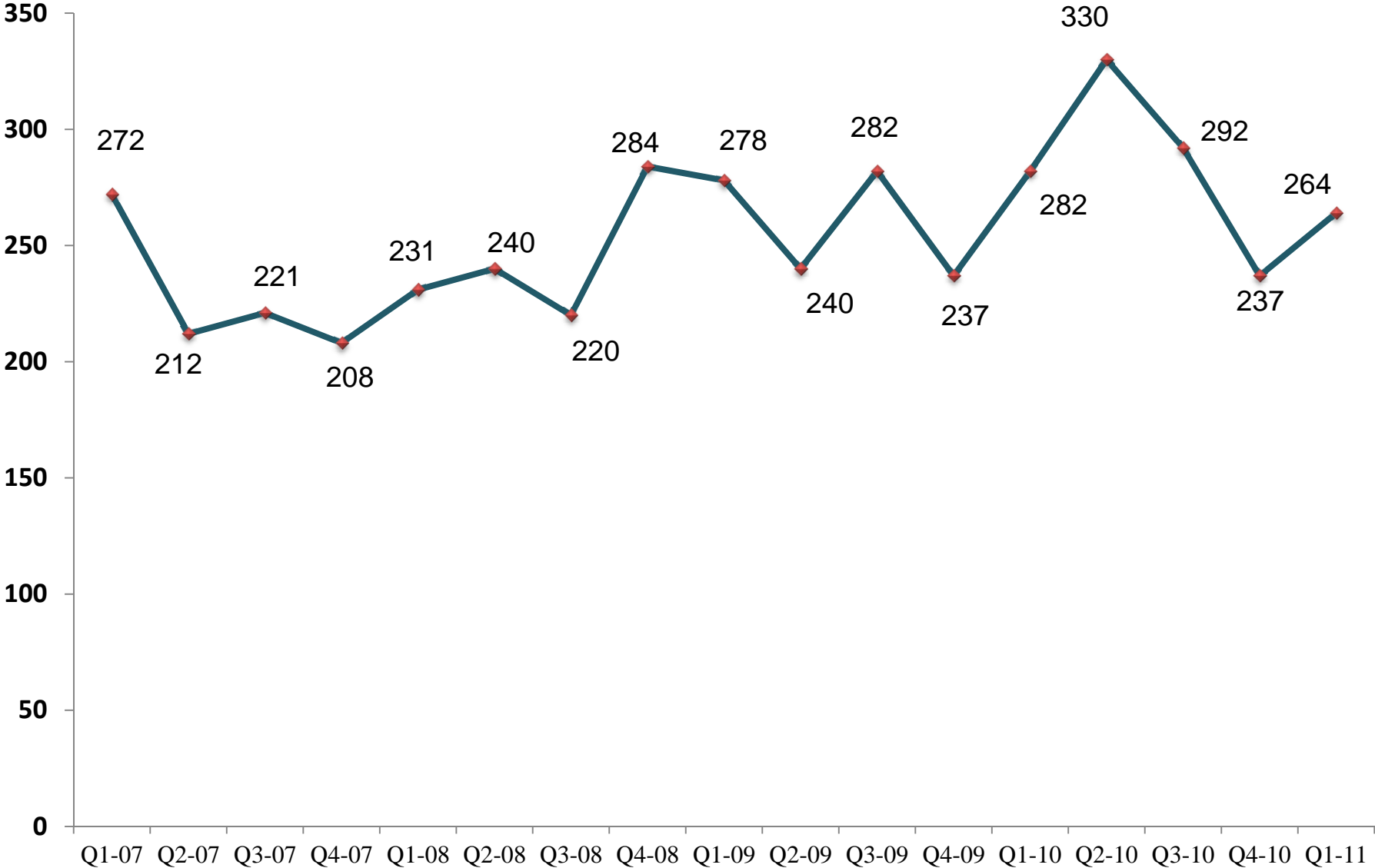
Denominator: All OI/ART patients with CD4 cell counts \geq 100 (within quarter)



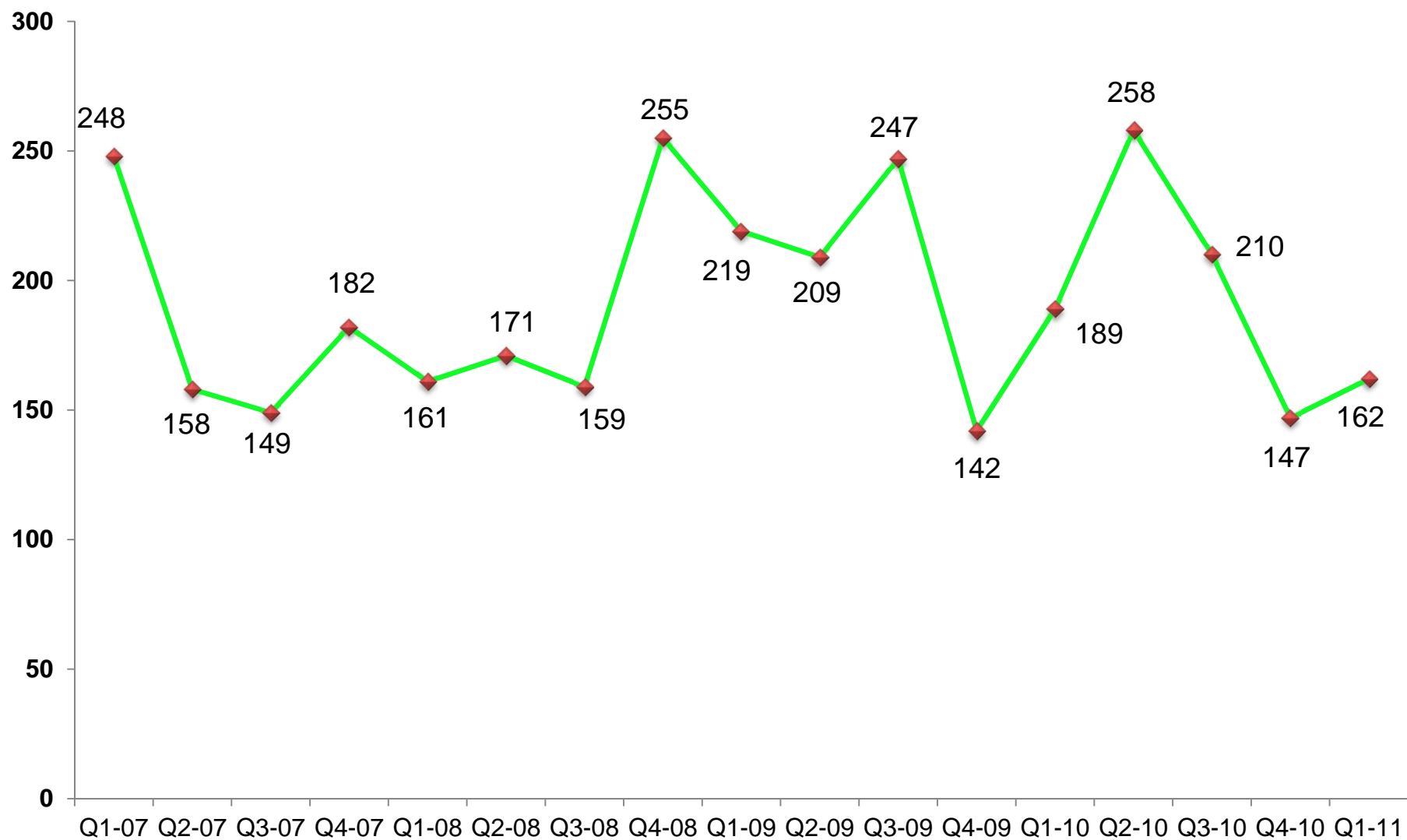
Percentage of Patients whose CD4<100 and CD4>=100 received Fluconazole by quarter in CJF-RH, BMC



Mean of CD4 at initial visit by quarter, in CJF-RH, BMC



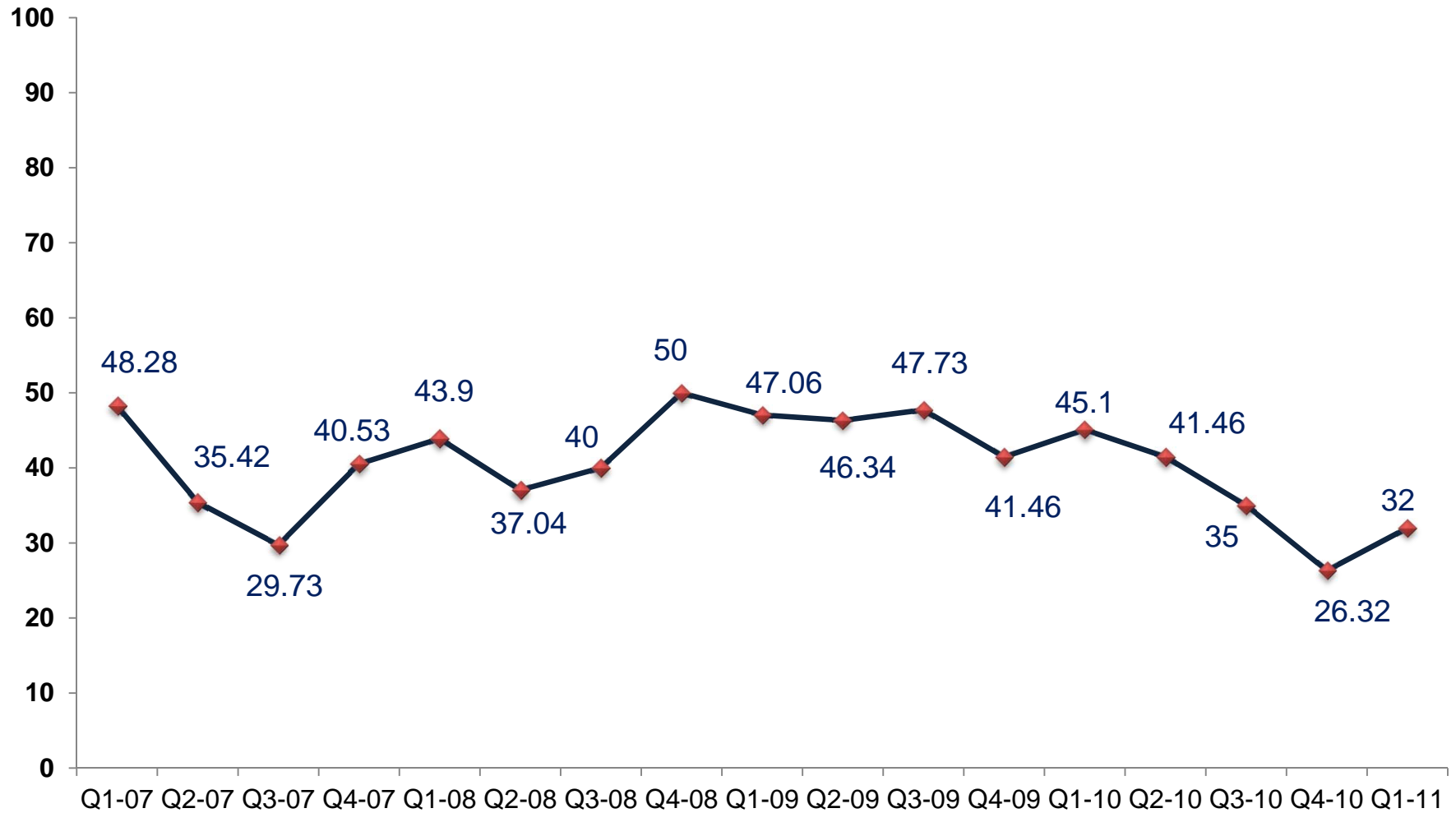
Median of CD4 at initial visit by quarter, in CJF-RH, BMC



Percentage of patients who has CD4>350 (CD4>250 before April 2010) at initial visit by quarter in CJF-RH,MBC

Numerator: Total number of initial visit patients with CD4> 250 (350) by quarter

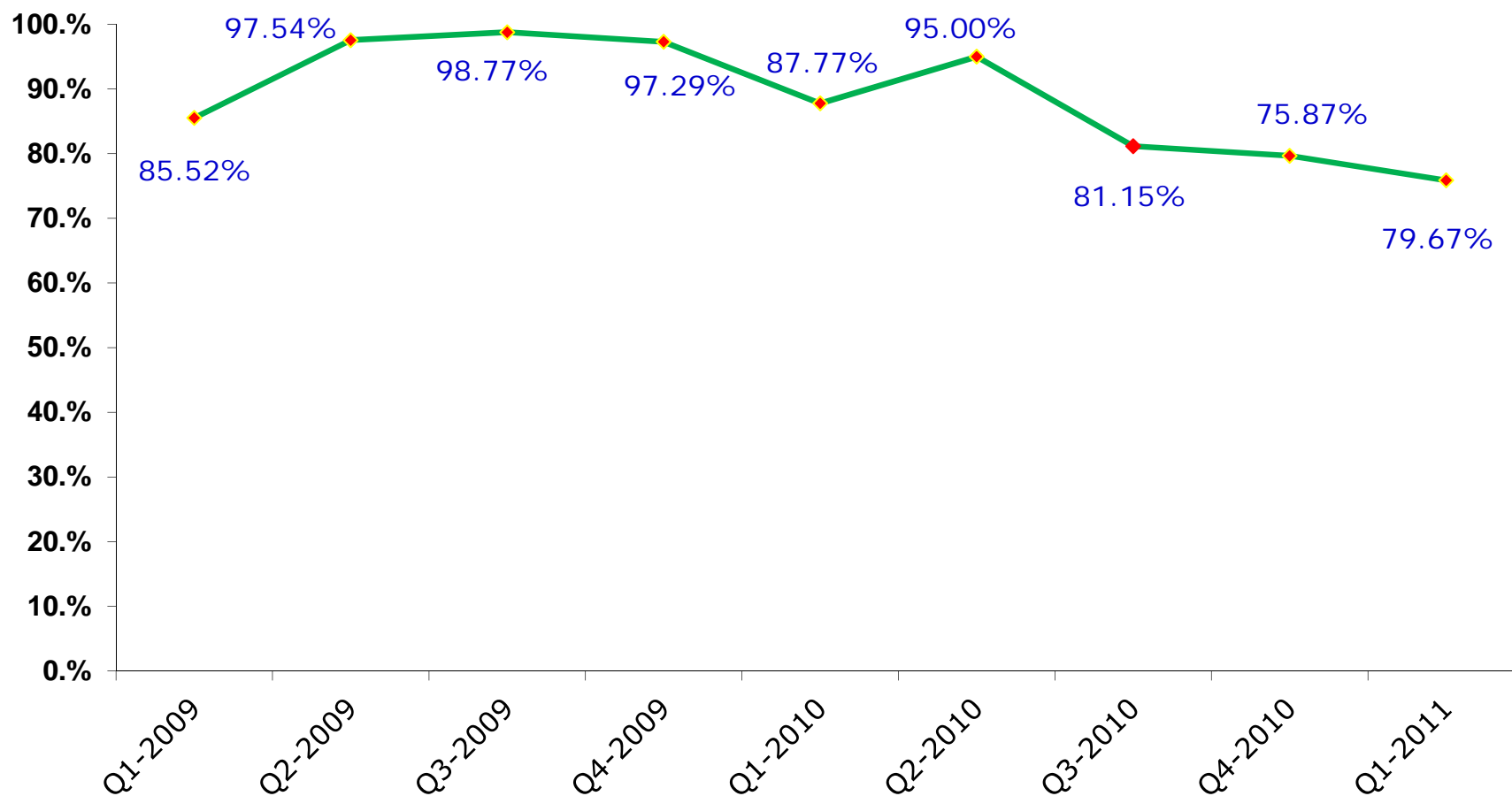
Denominator: Total number of initial visit patients by quarter



Percentage of HIV Testing among ANC 1 by Quarter in OD Mongkul Borey, BMC

Numenator = number of ANC1 post tested counseled

Denominator = total number of ANC first visit



Percentage of delivered women with known HIV status at by Quarter in CJF-RH, BMC

Numerator = Total Number of delivered Women with known HIV status

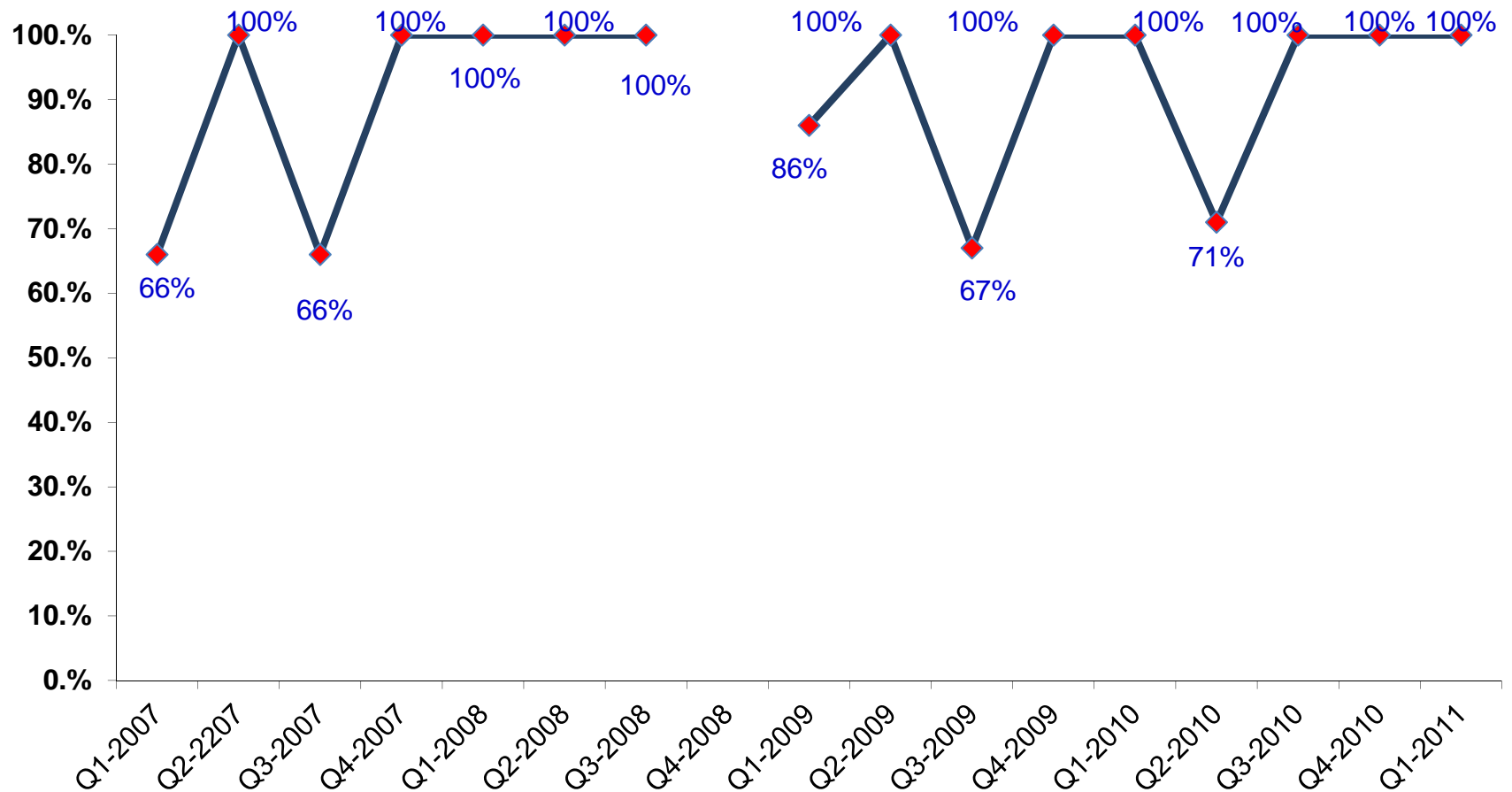
Denominator = Total Number of delivered Women



Percentage of HIV + Women who received any prophylaxis or HAART during Labor by Quarter in CJF-RH, BMC

Numerator = Total Number of delivered women who received any prophylaxis or HAART during Labor;

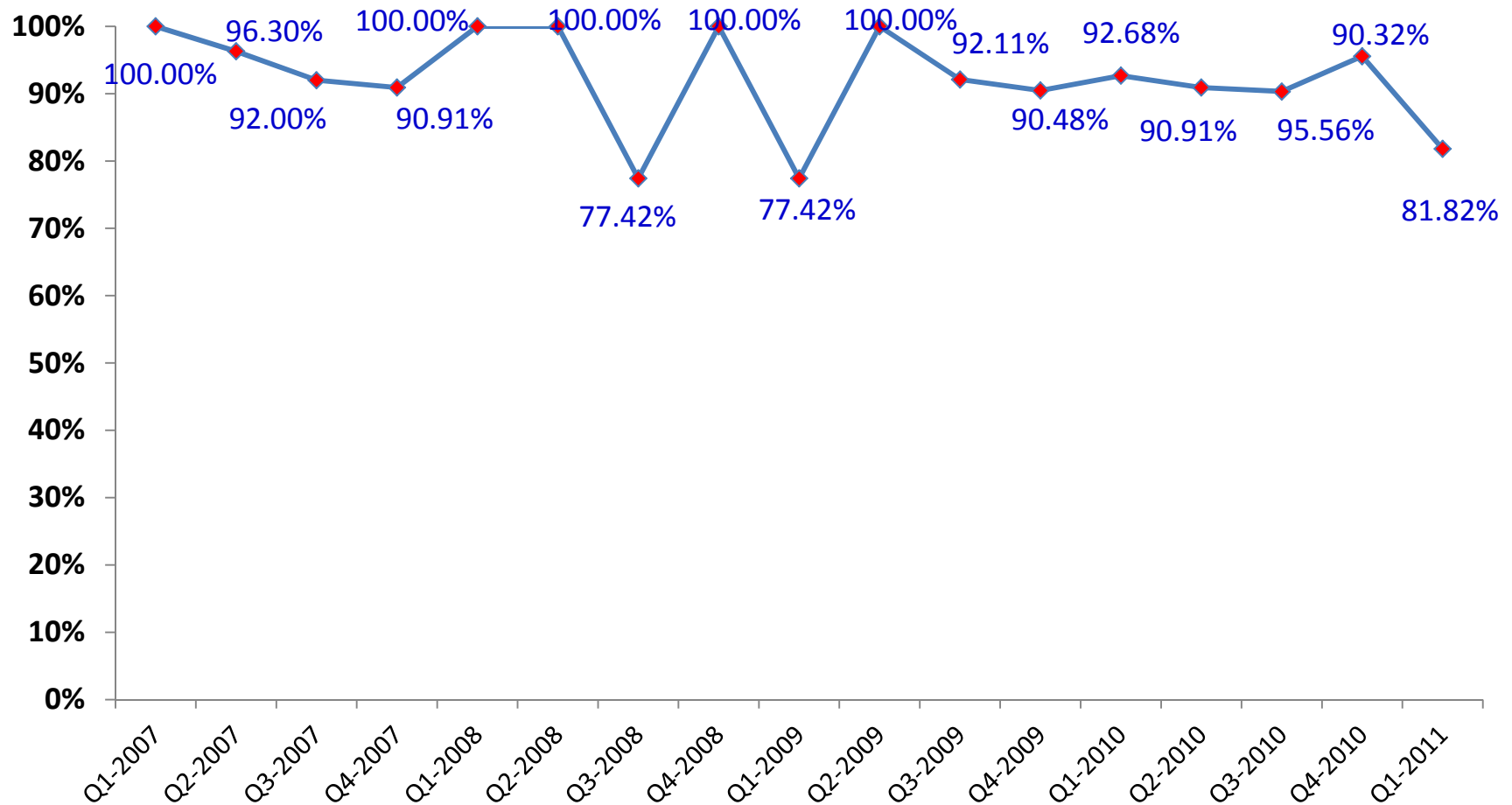
Denominator = Total Number of Women who Delivered with known HIV status +



Percentage of new TB Patients who were screened for HIV by quarter in CJF-RH, BMC

Numerator: Total number of new TB patient screened for HIV status at VCCT by quarter

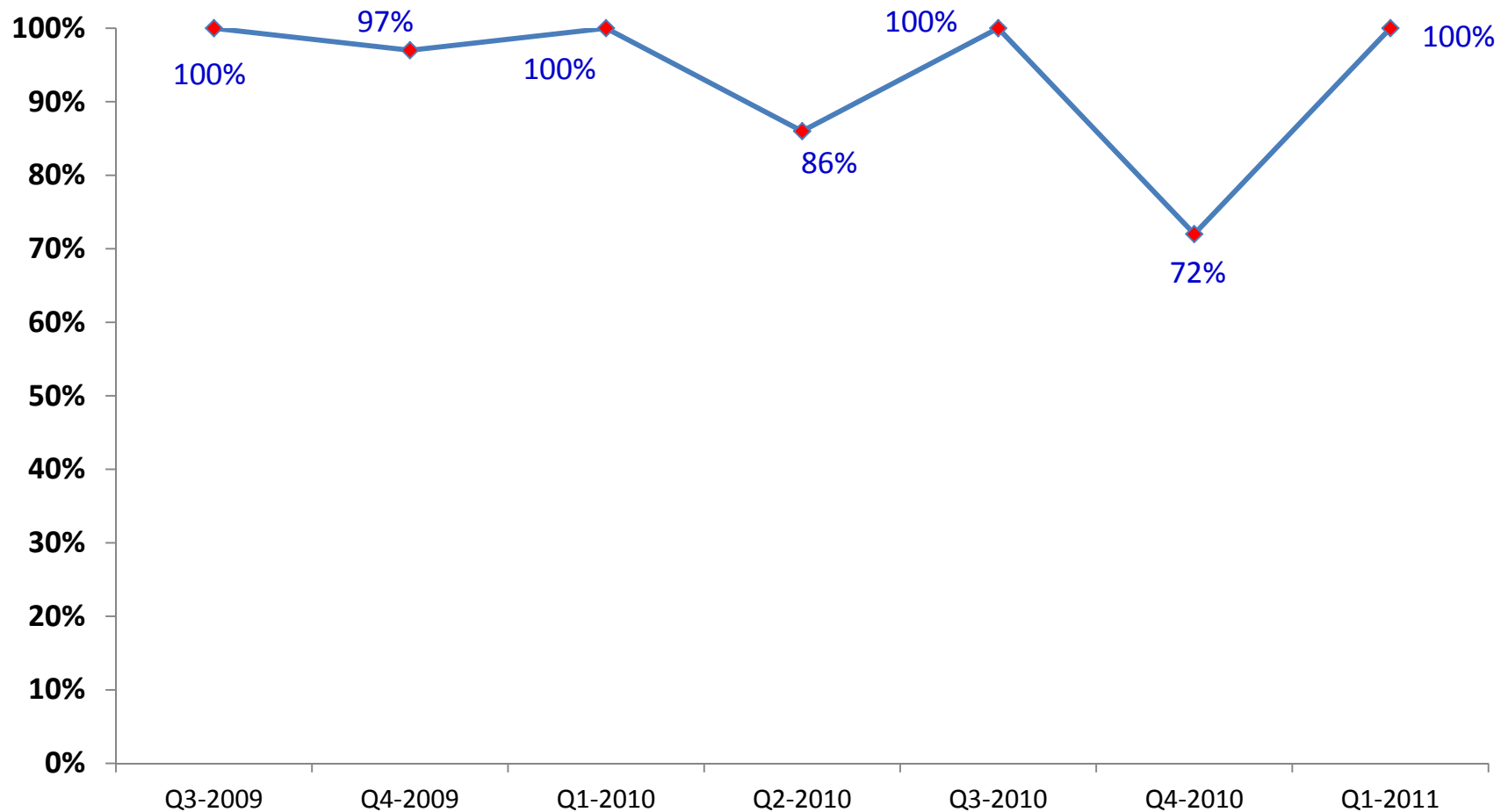
Denominator: Total number of new TB patient registered at TB ward by quarter



Percentage of patients newly registered at OI/ART who were screened for TB by quarter in CJF-RH, BMC

Numerator: Total number of new OI patient screened for TB status by quarter

Denominator: Total number of new patient registered at OI/ART site by quarter



វិភាគបញ្ហា ចំណាត់ថ្នាក់បញ្ហា ដំណោះស្រាយ

និង កែតម្រូវដៃគោលការណ៍សកម្មភាព

**កម្មវិធីពង្រឹងគុណភាពបន្ត លើសេវាថែទាំបន្ត មន្ទីរពេទ្យបង្អែក
មិត្តភាពកម្ពុជា-ជប៉ុន មង្គលបុរី ទេត្តបន្ទាយមានជ័យ**

១៩ កក្កដា ឆ្នាំ ២០១១

បង្ហាញដោយ លោកវេជ្ជ. ពី ពានតូ

**អនុប្រធានផ្នែក OI/ART និងជំនួយប្រធានផ្នែកជំងឺទូទៅ នៃមន្ទីរពេទ្យបង្អែកមិត្តភាព
កម្ពុជា-ជប៉ុន មង្គលបុរី ទេត្តបន្ទាយមានជ័យ**

មាតិកា

- កំណត់បញ្ហាជាអាទិភាព
- វិភាគបញ្ហា
- ដោះស្រាយបញ្ហា
- កែតម្រូវផែនការសកម្មភាព

កំណត់បញ្ជាក់ជាអាទិភាព

- សំខាន់
- បន្ទាន់
- អាចធ្វើទៅបាន

Score and Rank

No.	Indicators	Important	urgent	Feasibility	Total Score	Rank
1	ART die	13	0	0	13	8
2	ART Lost	14	10	14	38	5
3	OI Lost	4	2	1	7	11
4	Eligible CD4<350 or WHO stage 4 (60days)	14	14	15	43	1
5	CD4<200 Cotrim or CD4<100 , Fluco	14	13	13	40	3
6	Initial visit with CD4>250 or CD4>350	11	0	0	11	9
7	ANC1, HIV testing	13	13	12	38	5
8	Delivery know HIV	1	1	0	2	12
9	HIV + get prophylaxis	8	1	1	10	10
10	Late beyond buffer (3day)	14	14	15	43	1
11	Keep first line	0	0	0	0	13
12	TB New Screen HIV	14	12	13	39	4
13	OI New screen TB	14	13	11	38	5

ការត្រួតពិនិត្យ indicators (3/13)

- ភាគរយនៃអ្នកនៃអ្នកជំងឺដែលមាន CD4 តូចជាង ២៥០/៣៥០ ឬ WHO stage 4 ដែលបានផ្តល់ថ្នាំប្រឆាំងមេរោគអេដស៍ (ក្នុងរយៈពេល ៦០ថ្ងៃ)
 - សំខាន់ៈ ១៤/១៦
 - បន្ទាន់ៈ ១៤/១៦ និង អាចធ្វើបានៈ ១៥/១៦
- ភាគរយនៃអ្នកជំងឺមកពិនិត្យយឺត ហើយអស់ថ្នាំបំប្រុង (លើស ៣ថ្ងៃ)
 - សំខាន់ៈ ១៤/១៦
 - បន្ទាន់ៈ ១៤/១៦ និង អាចធ្វើបានៈ ១៥/១៦
- ភាគរយនៃអ្នកជំងឺដែលមាន CD4 តូចជាង ២០០/១០០ ទទួលការព្យាបាលដោយឱសថ Cotrimoxazole/Fluconazole
 - សំខាន់ៈ ១៣/១៦
 - បន្ទាន់ៈ ១៣/១៦ និង អាចធ្វើបានៈ ១៣/១៦

វិទ្យាសាស្ត្រ

ភាគរយនៃអ្នកជំងឺ
ដែលសមស្របនឹងទទួល
ARV ក្នុងរយៈពេល
៦០ថ្ងៃ

អ្នកជំងឺ

- មិនសូវមានកាយលំដឹងពីថ្នាំពន្យារ អត់ចេះអក្សរ ក្រីក្រ អ្នកជំងឺមានអាស្រ័យដ្ឋានមិនច្បាស់លាស់
- ខ្វះមធ្យោបាយធ្វើដំណើរ (គ្រៅអង្គការធម្មបាត្រា) /ធ្វើដំណើរ /ផ្ទះឆ្ងាយ ផ្លាស់ប្តូរទីលំនៅ ចំណាកស្រុក
- អ្នកជំងឺមានមិនសុខភាពល្អមិនអាចធ្វើដំណើរបាន អ្នកជំងឺមានសុខភាពល្អមិនយកថ្នាំ
- អ្នកជំងឺស្លាប់មុនពេលទទួលថ្នាំ អ្នកជំងឺខ្លះពេលពិនិត្យហើយឈប់មកវិញ
- មានការភ្លេចការណាត់របស់គ្រូពេទ្យ អ្នកជំងឺមិនចូលក្រុម HBC

ប្រព័ន្ធ

- ខ្វះប្រព័ន្ធសំរាប់ទំនាក់ទំនងជាមួយនឹងអ្នកជំងឺ មានការដាក់ពិន្ទុអ្នកជំងឺ
- HBCមិនអាចគ្រប់គ្រងបានអស់ដោយសារអ្នកជំងឺនៅក្រៅដំបូងគ្របដណ្តប់
- មិនមានប្រព័ន្ធបញ្ជូនព័ត៌មានជាមួយ HBC, MMM, Data, Counselor Doctor, Lab,...
- HBC ថវិកាសំរាប់បញ្ជូនជំងឺនៅមានកំរិត (ដោយសារអ្នកជំងឺមាន ការកើនឡើងជារៀងរាល់ឆ្នាំ ហើយផ្តល់ជូនដែលក្រីក្រតែប៉ុណ្ណោះ)
- ការផ្តល់សេវាមានតែពេលល្ងាច

អ្នកផ្តល់សេវា

- គ្រូពេទ្យ និង nurse មានបន្ទុកច្រើនផ្នែក
- ខ្វះប្រាក់លើកទឹកចិត្ត
- គ្រូពេទ្យណាត់យូរពេក
- ខ្វះគ្រូពេទ្យ ខ្វះ nurse

ភាគរយនៃអ្នកជំងឺមក
ទទួលថ្នាំយឺតដោយ
ហួសថ្នាំបំប្រុងចំនួន៣ថ្ងៃ

អ្នកជំងឺ

- ចំណាកស្រុក (ទៅរកស៊ីនៅថៃ មកពីស្រុកផ្សេង) ផ្លូវពិបាក ផ្ទះនៅឆ្ងាយ មានជីវភាពក្រីក្រខ្លាំង
- អ្នកជំងឺមើលច្រលំថ្ងៃណាត់ដោយសាមីនចេះអក្សរ អ្នកជំងឺខ្លីថ្នាំគ្មានប្រើ អ្នកជំងឺមានជំងឺធន់ពេក
- ខ្វះថវិកាធ្វើដំណើរ រឹមធ្យោបាយធ្វើដំណើរ អ្នកជំងឺជាប់រវល់ផ្ទាល់ខ្លួន មានបញ្ហាផ្លូវចិត្ត
- អ្នកជំងឺមិនចូលក្រុម HBC អ្នកជំងឺមិនយល់ច្បាស់ពីការប្រើប្រាស់ថ្នាំពន្យារ
- អ្នកជំងឺមានទំលាប់មកយឺត អោយគេបើកថ្នាំជំនួស អ្នកជំងឺប្តូរលេខទូរស័ព្ទ

ប្រព័ន្ធ

- ខ្វះមធ្យោបាយសំរាប់ទំនាក់ទំនងជាមួយនិងអ្នកជំងឺ

អ្នកផ្តល់សេវា

- គ្រូពេទ្យណាត់ថ្ងៃច្រលំ
- ការណាត់អ្នកជំងឺមានការខុសគ្នារវាង សៀវភៅអ្នកជំងឺ និង ប្រព័ន្ធទិន្នន័យ
- អ្នកផ្តល់ប្រឹក្សាពន្យល់អ្នកជំងឺនៅមានកំរិត

ភាគរយនៃអ្នកជំងឺពេញវ័យ
ដែលមាន CD4<200/100 ទទួល
ការព្យាបាលដោយ Cotrim/Fluco

អ្នកជំងឺ

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ប្រព័ន្ធ

- មិនមានប្រព័ន្ធបញ្ជូនព័ត៌មានជាមួយ HBC, MMM, Data, Counselor Doctor, Lab,...
- មានការខ្វះខាតសំភារៈការិយាល័យ

អ្នកផ្តល់សេវា

- ត្រូវពេទ្យពិចការងារច្រើន
- អ្នកជំងឺបញ្ជូនដេកពេទ្យមិនចាំបាច់សរសេរថ្នាំ
- ត្រូវពេទ្យភ្លេចបំពេញឯកសារ ត្រូវពេទ្យសរសេរអក្សរកាត់
- អ្នកបញ្ជូនទិន្នន័យខ្វះកាទំនាក់ទំនាក់ទំនងជាមួយគ្រូពេទ្យ

သော့: နှစ်သိန်းပိဉ္စေ့

បង្កើនភាគរយនៃអ្នកជំងឺដែលសមស្រប
នឹងទទួលបាន ARV ក្នុងរយៈពេល ៦០ ថ្ងៃ
ពី ៨៤.២% ទៅ ៩៥% (ក្នុងរយៈ
ពេល ១២ខែ)

អ្នកជំងឺ

- អ្នកផ្តល់ប្រឹក្សា MMM, HBC ព្យាយាមផ្តល់ប្រឹក្សាដល់អ្នកជំងឺបន្ថែម
- ទាក់ទងអាស័យដ្ឋានអ្នកជំងឺបន្ថែមទៀត តាមរយៈបងប្អូន មិត្តភក្តិ
- អោយមានអង្គការដៃគូរផ្សេងទៀត
- បង្កើនការផ្តល់ប្រឹក្សាដល់អ្នកជំងឺ

ប្រព័ន្ធ

- ប្រជុំក្រុមរួមមាន: IT, Doctor, nurse, pharmacist, counselors, MMM, HBC, PAO, Lab ... (2 times per month)
- ផ្តល់ប្រាក់សំរាប់ភ្ជាប់ទូរស័ព្ទ និងសេវាប្រចាំខែ
- រង់ចាំលិខិតណែនាំរបស់មជ្ឈមណ្ឌលពីការដាក់ពិន្ទុ
- បង្កើនការគ្រប់ដណ្តប់ (អង្គការផ្សេងក្រៅពីអង្គការធម៌យាត្រា)

អ្នកផ្តល់សេវា

- សុំបន្ថែមអ្នកឱសថចំនួន១រូប
- សុំបន្ថែមគ្រូពេទ្យចំនួន២រូប
- សុំបន្ថែមអ្នកផ្តល់ប្រឹក្សា/nurse ចំនួន២រូប

កាត់បន្ថយអត្រានៃអ្នកជំងឺមកទទួលថ្នាំយឺត
ដោយអស់ថ្នាំបំប្រុងចំនួន ៣ថ្ងៃ
ពី ៦.០% មក ៤.០% (ក្នុងរយៈពេល ១២ខែ)

អ្នកជំងឺ

- អោយមានអង្គការដៃគូរផ្សេងទៀត
- បង្កើនការអប់រំដល់អ្នកជំងឺតាមរយៈ អ្នកផ្តល់ប្រឹក្សា MMM, HBC

ប្រព័ន្ធ

- ផ្តល់ប្រាក់សំរាប់ភ្ជាប់ទូរស័ព្ទ និងសេវាប្រចាំខែ
- សុំមធ្យោបាយធ្វើដំណើរសំរាប់ទំនាក់ទំនងជាមួយអ្នកជំងឺ (ម៉ូតូ២គ្រឿង)

អ្នកផ្តល់សេវា

- អ្នកបញ្ចូលទិន្នន័យជ្រើសបន្ថែម
- សៀវភៅទិវានុលេខ
- សុំផ្តល់វគ្គបំប៉នមន្ត្រីមជ្ឈមណ្ឌលអ្នកផ្តល់ប្រឹក្សា និង គ្រូពេទ្យ

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អ្នកជំងឺ

បង្កើនភាគរយនៃអ្នកជំងឺពេញវ័យដែល
មាន CD4<200/100 ទទួលការព្យាបាល
ដោយ Cotrim/Fluco ពី ៣១%
ទៅ ៨០% (ក្នុងរយៈពេល១២ខែ)

ប្រព័ន្ធ

-ប្រជុំក្រុមរួមមាន:IT, Doctor, nurse, pharmacist, counselor
MMM, HBC,PAO, Lab ,IT...
-សុំសំភារៈការិយាល័យបន្ថែម

អ្នកផ្តល់សេវា

-សុំបន្ថែមគ្រូពេទ្យ
-គ្រូពេទ្យព្យាយាមបំពេញឯកសារអោយបានត្រឹមត្រូវ
-អ្នកបញ្ជូនទិន្នន័យបង្កើនទំនាក់ទំនាក់ទំនងជាមួយគ្រូពេទ្យ

កែលម្អវិធីនិងសកម្មភាព

Action Plan for CQI for CJF-RH, BMC 2011-2012

Objective	Main activities	Detail activities	Project Month												Expected/input	Budget	Source
			1	2	3	4	5	6	7	8	9	10	11	12			
1. Increase the percentage of patient with CD4 less than 350 or WHO stage 4 who start ART within 60 days between 84.2% and 95% at the end of July 2012																	
	1. Patient education and support																
		Counselors, MMM, HBC team explain the importance of appointment's adherence to the patient	x	x	x	x	x	x	x	x	x	x	x	x	x		
	2. Improve staffing condition																
		Meeting IT, Doctor, nurse, pharmacist, counselors, MMM, HBC,PAO, Lab,...	x	x	x	x	x	x	x	x	x	x	x	x	25p*5\$*2t*12m	\$3,000.00	
		More incentive 2 nurses	x	x	x	x	x	x	x	x	x	x	x	2p*70\$*12m	\$1,680.00		
		More incentive 2 physicians	x	x	x	x	x	x	x	x	x	x	x	2p*100\$*12m	\$2,400.00		
		More incentive 1 pharmacist	x	x	x	x	x	x	x	x	x	x	x	1p*100\$*12m	\$1,200.00		
	3. Request for more equipment/materials																
		Phone card	x	x	x	x	x	x	x	x	x	x	x	20\$*12m	\$240.00		
		New phone connection fee	x											1 set	\$30.00		
															Sub Total	\$8,550.00	

Objective	Main activities	Detail activities	Project Month												Expected/input	Budget	Source		
			1	2	3	4	5	6	7	8	9	10	11	12					
2. Decrease the percentage of late visit beyond drug buffer from 6.0% to 4.0% at the end of July 2011																			
1. Patient education and support																			
		Counselors, MMM and HBC team explain the importance of appointment' s adherence to the patient	x	x	x	x	x	x	x	x	x	x	x	x					
		Counselor stress the importance of appointment' s adherence to the patient	x	x	x	x	x	x	x	x	x	x	x	x					
2. Improve staffing condition																			
		Retreat for staff (OI/ART team) motivation															\$3,000.00		
3. Request for more equipment/materials																			
		Monthly fee for telephone	x	x	x	x	x	x	x	x	x	x	x	x					
		New phone line connection	x																
4. Improve communication																			
		2 Motocycles															2moto*1200\$	\$2,400.00	
		Appointment book	x														10b*5\$	\$50.00	NCHADS
5. Training																			
		Refresh training for counselor and Doctor																	
															Sub- total	\$5,450.00			

3. Increase the percentage of patients whose CD4<200/100 and received Cotrimoxazole/Fluconazole from 31% to % at the end of July 2011																
1. Improve staffing condition																

