How to do a Cost Analysis and Use the Results

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STD TAC STD-RELATED REPRODUCTIVE HEALTH TRAINING AND TECHNICAL ASSISTANCE CENTER

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Federal Funding Cuts

Division of HIV/AIDS Prevention

- Between 2007 and 2012, HIV prevention funding decreased
- 39 jurisdictions receiving less funding

Division of STD Prevention

- Between 2003 and 2014, funding for STD clinical services decreased 36% (adjusted for inflation)

Nastad: National HIV Prevention Inventory
Gail Bolan, Director of the Centers for Disease Control and Prevention (CDC), Division of STD Prevention (DSTDP), recently stated at the National Coalition of STD Directors (NCSD) Annual Meeting

State Program Cuts

Table 2. Number and Percentage of SHAs with Program Cuts Since July 2008 by Program Area (N=55)

	Number with Program Cuts	As % of the Whole
Public health hospitals and clinics	26	47%
HIV, AIDS, and STDs	25	45%
Disease-specific programs (ALS, Alzheimer's, Arthritis, Asthma, Cystic Fibrosis, Epilepsy, Genetic Disorders, Hepatitis C, Infectious Diseases, Osteoporosis, Parkinson's, PKU, Renal Diseases, Sickle Cell, Tuberculosis, Valley Fever)	22	40%
Family health and nutrition (including WIC)	22	40%
Maternal and child health programs	20	36%
Prevention programs	18	33%
Tobacco prevention and control	17	31%
Immunization	17	31%
Children with special healthcare needs	17	31%
Family planning services	16	27%

The Association of State and Territorial Health Officials, Budget Cuts Continue to Affect the Health of Americans, http://www.astho.org/Research/State-Health-Agency-Budget-Cuts/, Update October 2013

Uninsured Population Exceeds Safety Net Funds

- Although decreases are expected, a substantial need will continue to exist for safety net STD prevention services over the next 10 years
- The cost exceeds the current DSTDP Budget

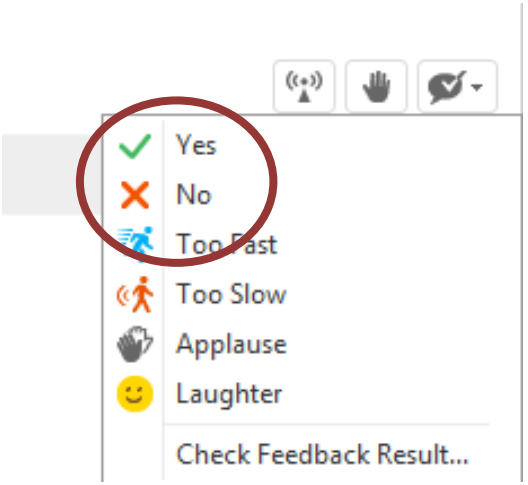
Learning Objectives

1. Be familiar with the steps for completing a program level and service level cost analysis
2. Understand how to use the results of the cost analysis
3. Be able to identify data sources needed to complete revenue projections

POLL

1. Have you conducted or participated in a cost analysis in the past two (2) years?

- ❑ Yes
- ❑ No



Cost Analysis

What is the Purpose of Conducting a Cost Analysis?

- Increases understanding of how to use funds
- Helps determine which services to focus on
- Helps set charges/fees
- Assists in negotiating charges with various payers

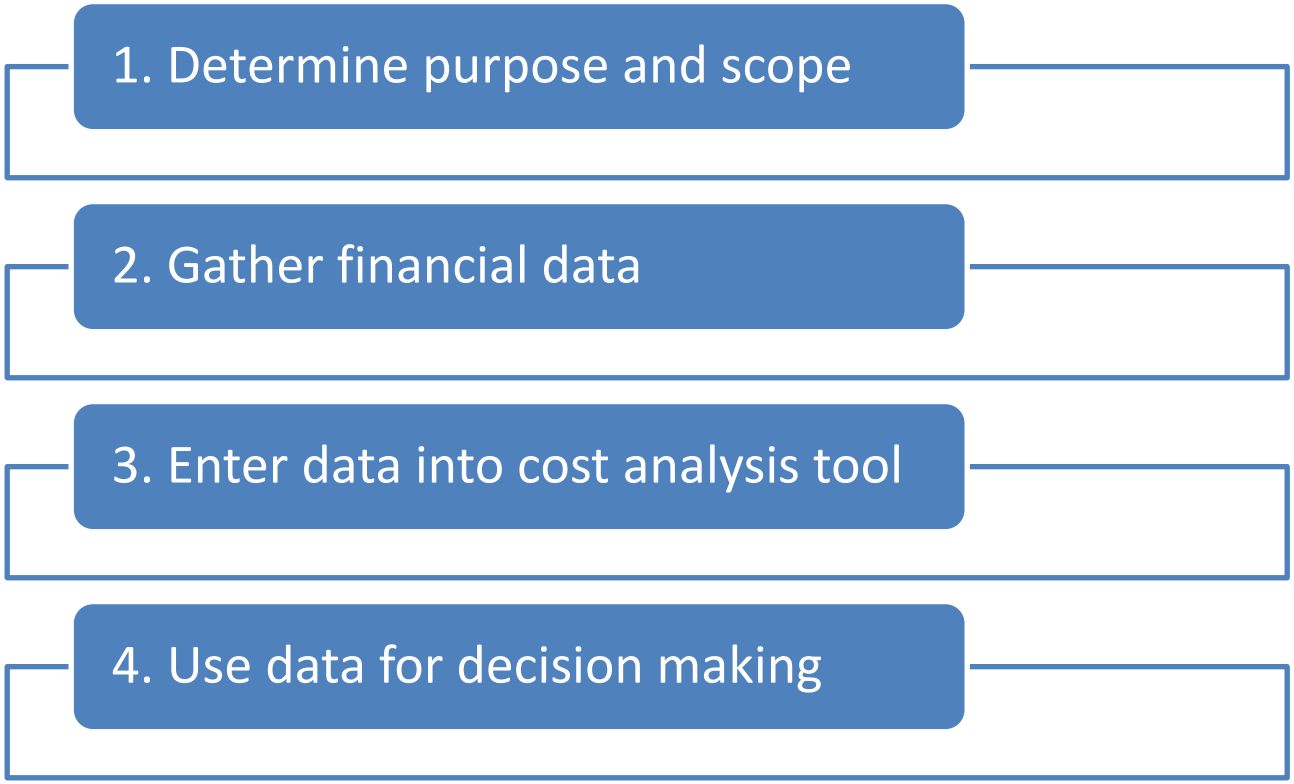
Benefits of a Cost Analysis

- Develop, implement, and analyze efficiency
- Control costs
- Project incremental costs
- Financial viability
- Successful contract management

Cost Analysis Tools

- Program Cost Analysis (PCA) Tool
- Unit Cost Analysis Tool
- Staff Time Allocation Tool

Steps for Completing a Cost Analysis



Program Cost Analysis (PCA) Tool

- Assists in determining costs for a specific program or department compared to all agency costs

- Good for budgeting, strategic planning, and advocacy

Program Cost Analysis Tool

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Organization Name: _____

Time Frame For Data: _____

Note: Enter data in the yellow areas only, the green areas will calculate automatically.

		Assembling HIV prevention program costs			
(A)	Total Organization Costs (B)	Direct program costs (C)	Indirect program costs (D)	In-Kind contributions for program costs (E)	Total program cost (F)
A. ADMINISTRATIVE:					
1. Executive Director/CEO					$ -
2. Administrator/COO					$ -
3. Administrative Support					$ -
4. Finance Director/CFO					$ -
5. Fiscal Support					$ -
6. Medical Director					$ -
7. Public Relations/Marketing					$ -
8. Legal					$ -
9. Data Processing					$ -
10. Staff Travel					$ -
11. Telephone					$ -
12. Postage					$ -
13. Operating Interest					$ -
14. In Service & Staff Education					$ -
15. Office Supplies					$ -
16-22. Other **Allowable** Admin. Exp. (specify below):					
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
TOTAL ADMINISTRATIVE	$ -	$ -	$ -	$ -	$ -

Components of PCA

- Administrative
- Patient Transportation
- Medical
- Laboratory
- Pharmacy
- Other Health Services
- Other Non-direct Health Services
- Employee Health and Welfare
- Facility Costs

PCA Example

John Snow, Inc.

Program Cost Analysis Tool

Organization Name: HD in Smith County

Time Frame For Data: January - December 2014

Note: Enter data in the yellow areas only, the green areas will calculate automatically.

		Assembling **STD** testing program costs				
(A)	Total Organization Costs (B)	Direct program costs (C)	Indirect program costs (D)	In-Kind contributions for program costs (E)	Total program cost (F)	Notes
A. ADMINISTRATIVE:						
1. Executive Director/CEO					$ -	
2. Administrator/COO					$ -	
3. Administrative Support					$ -	
4. Finance Director/CFO	$75,000.00		$22,500.00		$ 22,500.00	
5. Fiscal Support					$ -	
6. Medical Director	$155,000.00	$23,250.00			$ 23,250.00	
7. Public Relations/Marketing					$ -	
8. Legal					$ -	
9. Data Processing					$ -	
10. Staff Travel	$12,000.00	$5,000.00			$ 5,000.00	
11. Telephone					$ -	
12. Postage					$ -	
13. Operating Interest					$ -	
14. In Service & Staff Education					$ -	
15. Office Supplies	$2,000.00		$600.00		$ 600.00	
TOTAL ADMINISTRATIVE	$ 244,000.00	$ 28,250.00	$ 23,100.00	$ -	$ 51,350.00	

PCA Example (cont.)

John Snow, Inc.

Program Cost Analysis Tool

Organization Name: HD in Smith County

Time Frame For Data: January - December 2014

Note: Enter data in the yellow areas only, the green areas will calculate automatically.

		Assembling **STD** testing program costs				
(A)	Total Organization Costs (B)	Direct program costs (C)	Indirect program costs (D)	In-Kind contributions for program costs (E)	Total program cost (F)	Notes
A. ADMINISTRATIVE:						
7. Gas					$ -	
8. Electric					$ -	
9. Water					$ -	
10-13 Other **Allowable** Exp.(specify below):						
					$ -	
					$ -	
					$ -	
					$ -	
TOTAL FACILITY COSTS	$ -	$ -	$ -	$ -	$ -	
TOTAL COSTS	$ 244,000.00	$ 28,250.00	$ 23,100.00	$ -	$ 51,350.00	

TOTAL OUTSIDE LAB COSTS	$ -

Unit Cost Analysis Tool

- The cost of services is determined by the expenses and utilization

- Considers all of the resources associated with a particular service and calculates how much it costs

Unit Cost Analysis Tool

This tool has been tailored from cost analysis tool develop by the American Academy of Family Physicians (www.aafp.org/fpm)

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Organization Name: _____

Time Frame For Data: _____

Note: Do not enter data in the green areas, they will calculate automatically.

STEPS	NOTES	UNIT COST	IN-KIND CONTRIBUTIONS	UNIT COST with IN-KIND	COMMENTS
1. Define the unit of service:			N/A	N/A	
2. Determine the number of units of service provided in the defined time period:			N/A	N/A	
3. Calculate the direct costs:					
Staff Cost:				$ -	
Management Cost:				$ -	
				$ -	
				$ -	
				$ -	
HIV Tests:	Per supply catalog			$ -	
Laboratory Services:	Per typical charges			$ -	
Other:				$ -	
TOTAL direct costs per unit of service:		$ -	$ -	$ -	
4. Calculate indirect costs:					
Rent, utilities, etc.:				$ -	
Administrative salaries and benefits::				$ -	
Insurance:				$ -	
Other:				$ -	
TOTAL:		$ -	$ -	$ -	
Basis of Allocation: Allocation rate:	Percentage		N/A	0.00	
Number of units of service provided:	From Step 2 above	0.00	N/A	0.00	
Total indirect costs per unit of service		#DIV/0!		#DIV/0!	
5. Calculate depreciation					
Initial cost of equipment associated with the service:				$ -	
Resale value at the end of its useful life:				$ -	
TOTAL:		$ -	$ -	$ -	
Estimated years the practice will use the equipment:				0.00	
Basis of Allocation: Allocation rate:	Percentage		N/A	0.00	

Unit Cost Analysis Steps

- Step 1: Define the unit of service
- Step 2: Determine the number of units of service provided
- Step 3: Calculate the direct costs
- Step 4: Calculate the indirect costs
- Step 5: Calculate the unit cost

Define the unit of service

- What service do you want to focus on?
- How do you define a unit of this service?
- How can you “pull” the information?
- How do others define it?

Determine the number of units of service provided

- Practice Management System
- Database
- Audit

Calculate the direct costs

- Very important to unit cost analysis
- Largest cost: Staff Time
  - Use staff time allocation tool
- Other cost information

Calculate the indirect costs

Common bases for allocation include:

- Ratio of selected service to all services
- % of total revenue attributed to the service
- % of practice square-footage devoted to the service
- % of total direct costs attributed to the service

Calculate the unit cost

Direct costs per unit + Indirect costs per unit

= **Total Cost per Unit of Service**

Unit Cost Analysis Example

Staff Time Allocation Matrix

→ This tool is to compile time spent on selected activities to calculate direct costs in the Unit Cost Analysis tool. You can change, add or delete activities as needed to tailor this tool to your specific agency needs.

→ Use average times for each activity. Use a time study tool to determine time per activity that have greater variation, such as outreach, training, and condom distribution. Only select staff that are related to the activity, leave other cells blank.

→ Only select staff that are related to the activity, leave other cells blank. Add staff roles that are not included in the list below as needed.

→ Fill out to the best of your knowledge

Enter Estimated Minutes Per One Unit of the Activity (e.g. - providing one STD test)

Staff Roles	HIV Testing	STD Testing	STD Clinical Examination	STD Treatment	Training and Education	TB Testing	TB Treatment	Immunizations	Other Activity
1. Program Director									
2. Program Manager									
3. Program Staff									
4. Clinician									
5. Volunteer									
6. Sub-contractor / consultant									
7. Legal									
8. Laboratory Technician									
9. Data Processing									
10. Executive Director / CEO									
11. Administrator / COO									
12. Administrative Support									
13. Finance Director / CFO									
14. Fiscal Support									
15. Organizational Development									
TOTAL TIME PER ACTIVITY	0	0	0	0	0	0	0	0	0

Interpreting Cost Analysis Results

- If applicable, compare to what you are currently billing or budgeting for services provided
- Compare unit costs of services provided
- Are you making a loss or profit?
- Can you afford to continue offering the same set of services?

Review Market Rates

- What are the fees for comparable services in your area?
- Are you competitive?
- Do you offer more than, the same, or fewer services as other providers?
- What “discounts” are you offering and when?

Use the Cost Analysis Results

- Are there ways to reduce program costs?
  - Are there specific indirect or direct costs that are driving your program costs up?
  - Partnerships? To reduce costs by sharing space, clinician time, staff time, or electronic medical record licenses.
  - Does a free EMR make sense?


Costs
Revenues

Information to Estimate Revenue from Third-party Payers

❖ **Required:**

- Payer mix of clinic's population
- Number of annual visits provided by E&M Code

❖ **Nice to have if already billing:**

- Denial rates
- Deductions for co-pays not collected
- Deductions for self-pays not collected
- Average self-pay charge based on sliding-fee scale

Estimating Payer Mix

- Survey patient population for 30 days and ask patients what type of insurance they have
  - Medicaid
  - Medicaid Managed Care
  - Private insurance
  - Self-pay

Note: This survey is available: stdtac.org/files/2014/06/Survey-No-Billing_STDTAC.doc

STD Clinic Example – Revenue Projections

- Medicaid – 30%
- Medicaid Managed Care – 0%
- Private payers – 10%
- Uninsured – 60%

Insurance Coverage Estimates

Estimated *percent of current services* that will be billed to Medicaid.	30%
Estimated *percent of current services* that will be billed to Medicaid Managed Care Plans*** Use this column only if Medicaid Managed Care reimburses at a higher rate than Medicaid.	0%
Estimated *percent of current services* that will be billed to Private Insurance. *(Private Insurance generally reimburses at 100% of Medicare fee schedule.)*	10%
Estimated *percent of self pay-clients*	60%
Sum of all visits. (This does not have to add to 100% if you do not plan to bill all payer types in the next year.)	100%

Estimated net collections from previous year (This estimate will be compared to projections on the Est. Revenue Projections tab.)

Estimated Net Collections	

Other Payer Information

If the clinic has a flat fee for self-pay services, enter it in cell E9. If you have a sliding fee scale for self-pay, enter the average payment you receive for self-pay services.	$15.00
If you have negotiated a higher rate for Medicaid Managed Care as a percentage of Medicaid enter it in cell E10 Example: If you negotiated Medicaid Managed Care to pay 10% more than Medicaid rates, enter 110%	

Estimating Denials, collections and Deductions

Denials: If known, enter denial rate. Suggested estimate: 7%	Denial Rate for Medicaid	7%
	Denial Rate for Private Insurance	7%
	Denial Rate for Medicaid Managed Care (If you do not separate Medicaid and Medicaid Managed Care Services, leave blank)	
Deductions for co-pays deductibles **not** collected**** Suggested estimate is 33%	Percent of deductibles **not** collected (Example: If your clinic has 67% collection rate for co-pays and deductibles, enter 33%)	33%
Deductions for self-pay **not** collected; Suggested estimate 33%	Percent of self-pay fees **not** collected (Example: If your clinic has 67% collection rate of self-pay fees, enter 33%)	33%
Accounting for clients that move from self-pay to Medicaid	Percent of Medicaid Clients that Previously Self Paid	

Estimating Annual Visits by E&M Code

- **If provide clinical services but don't bill:**
  - Determine total number of annual visits
  - Pull 30 random clinic charts
  - Match services to appropriate E&M level
  - Use the distribution of E&M levels as an estimate for the following year
- **If already billing:**
  - Use previous year's E&M code distribution

Available at: http://stdtac.org/files/2014/06/Levels-of-Services_STDTAC.pdf

LEVELS OF SERVICES WORKSHEET - E&M: NEW PATIENT OFFICE VISIT

Code	History	Exam	Medical Decision Making (MDM)	Time
New Patient* Office Visits: History, Exam and MDM must be met. Code based on the score of the lowest element.				
99201	Problem Focused 1-3 HPI No ROS No PFSH 1	Problem Focused <1 BA/OS 1	Straightforward 1	10 Minutes
99202	Expanded Problem Focused 1-3 HPI 1 ROS No PFSH 2	Expanded Problem Focused 2-4 BA/OS 2	Straightforward 2	20 minutes
99203	Detailed 4 HPI 2-9 ROS 1PFSH 3	Detailed 5-7 BA/OS 3	Low Complexity 3	30 minutes
99204	Comprehensive 4 HPI 10 ROS 3 PFSH 4	Comprehensive 8 Organ Systems 4	Moderate Complexity New Problem w/ RX Acute Complicated Illness/ Injury Undx'd, New Problem 1 or more chronic Illness w/ mild exacerbation 4	45 minutes
99205	Comprehensive 4 HPI 10 ROS 3 PFSH 5	Comprehensive 8 Organ Systems 5	High Complexity New Problem with work up planned and high level of acuity 5	60 minutes

STD Clinic Example – Revenue Projections

- Clinic's client volume - **600** annual visits from January 1-December 31, 2015.
- Based on chart extraction they had the following service distribution:

New Patients:

99201- 4% (25)
99202-17% (100)
99203- 17% (100)
99204 -4% (25)
99205- 0

Established Patients:

99211- 4% (25)
99212- 25% (150)
99213- 25% (150)
99214 -4% (25)
99215-0

Tab 2B - Estimated Revenue Projections Worksheet - See expanded instruc

nstructions: If users have state-specific Medicaid, Medicaid Managed Care, Private Insurance or Inc
estimates entered in Column D of this Tab 2B:Estimated Revenue Projections Worksheet.

	Codes		Estimated Unit Count (Calendar Year)
Evaluation and Management Codes			
New patient office visit	Problem Focused-Straightforward	99201	25
	Expanded Problem Focused-Straightforward	99202	100
	Detailed-Low Complexity	99203	100
	Comprehensive-Moderate Complexity	99204	25
	Comprehensive- High	99205	0
Established patient office visit	Follow-up (presenting problems minimal)	99211	25
	Problem Focused-	99212	150
	Expanded Problem Focused-Low Complexity	99213	150
	Detailed-Moderate Complexity	99214	25
	Complexity	99215	
Subtotal: Evaluation and Management Codes			*600*

Estimated Net Patient Service Revenue from Medicaid, Medicaid Managed Care and Private Insurance			$18,180

Calculating Estimated **NET** Collections

	Estimated Percent of Fees Paid by Private Insurance (70%	$3,095.58	
	Estimated Percent of Fees Paid by Individual (30%)	$1,326.68	
Denials: If known, enter denial rate. Suggested estimate: 7%	Denial Rate for Medicaid	7%	$ (585.06)
	Denial Rate for Private Insurance	7%	$ (309.56)
	Denial Rate for Medicaid Managed Care	0%	$ -
Deductions for self-pay fees not collected. Suggested estimate 33% Suggested estimate is 33%	Percent of self-pay fees **not** collected	33%	$ (1,782.00)
Deductions for co-pays deductibles not collected**** Suggested estimate is 33%	Percent of deductibles **not** collected (Example: If your clinic has 67% collection rate for co-pays and deductibles, enter 33%)	33%	$ (437.80)
Accounting for clients that move from self-pay to Medicaid	Percent of Medicaid Clients that Previously Self Paid	0%	$ -
	Flat fee for clients with no insurance or average fee for clients with no insurance (Entered on Ins Coverage Est Worksheet)	$ 15.00	
Estimated net collections from Medicaid, Medicaid Managed Care and Private Insurance			$15,066
Estimated Net Collections from Previous Year			$0
Expected Additional Collections from Billing Third-Party Payers			$15,066

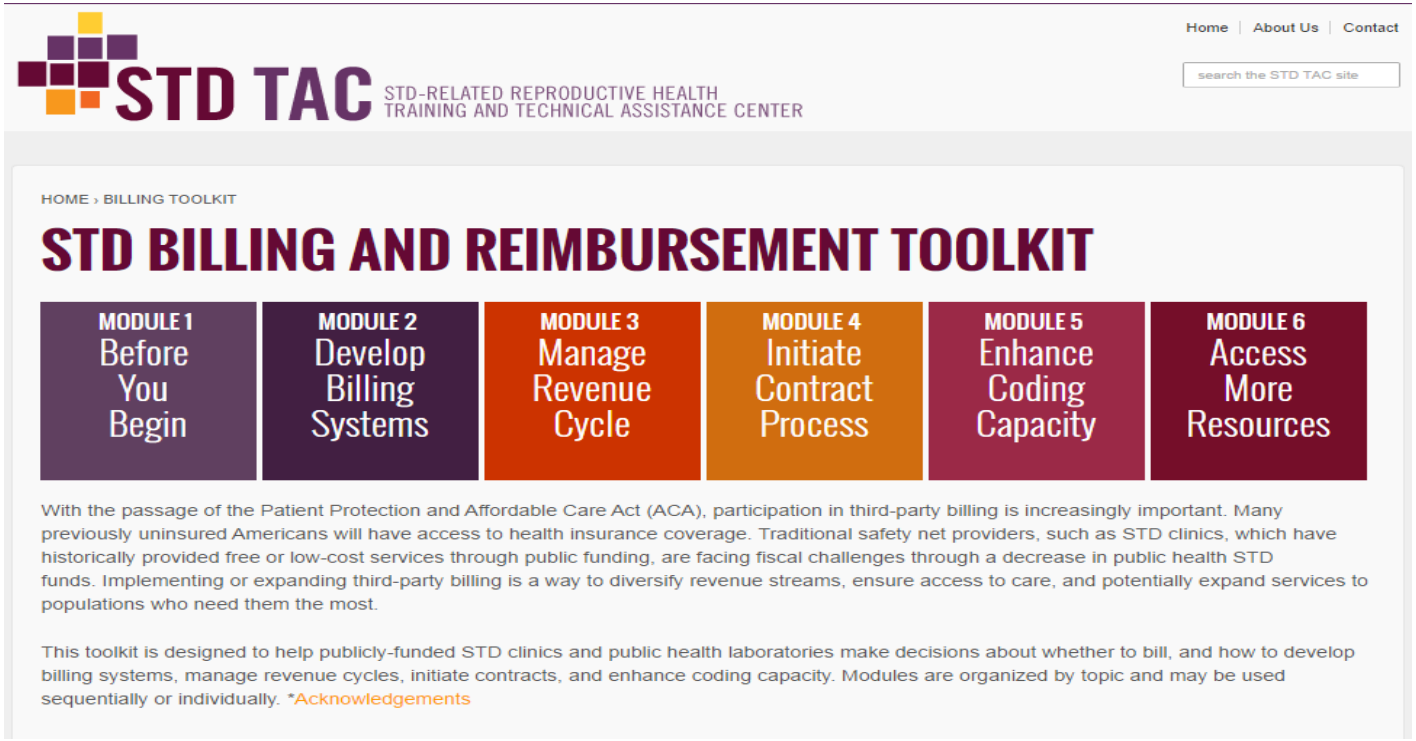
o them, whether your clinic plans to
nual exam.

Use Cost Analysis with Revenue Projections

- Are there ways to increase revenue?
  - Streamline clinic flow so billable clinician sees more patients
  - Evaluate the staffing mix- are you maximizing billable hours?
  - Increase annual visits (outreach, referral agreements)

Resources

- Go to stdtac.org to access the billing toolkit and request training and technical assistance



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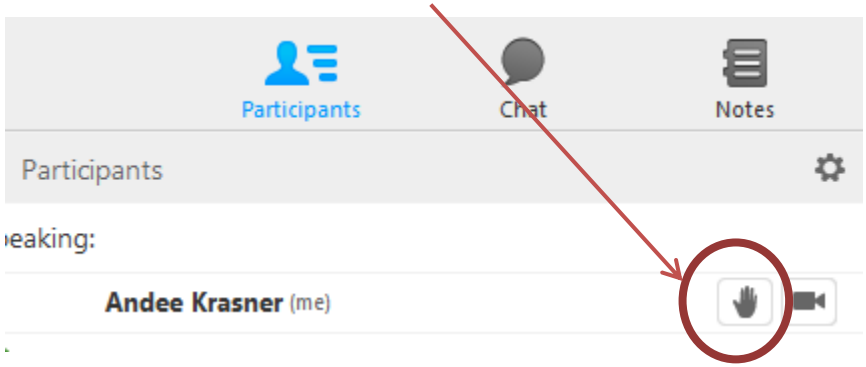
Resources

- View a recording of billing webinars including the previous cost analysis webinar and one on **Setting Fees** at: http://cba.jsi.com/resources/billingresources/
- Join us for **ICD-10 Coding for STD Services** with Lissa Singer: Wednesday, February 24th https://jsi.webex.com/jsi/onstage/g.php?MTID=eb88a9fa218292e4c943f2a40b177f077
- Request technical assistance (TA) at stdtac.org
- If you are a CBO providing HIV services, request TA from CBA@JSI: http://cba.jsi.com/request-cba/

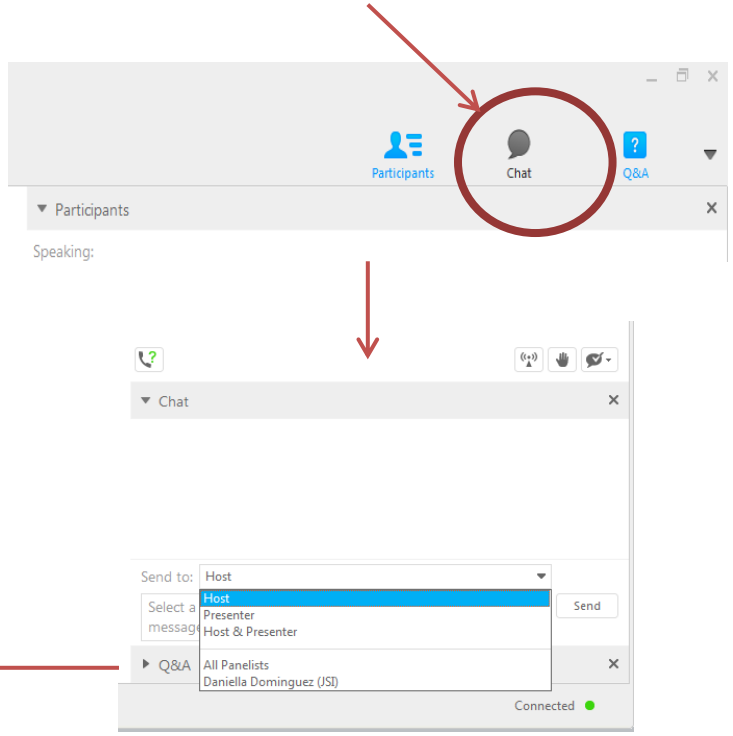
Questions?

1. Click the “raised hand” button next to your name and we will unmute you



or

2. Click the chat button on the upper right corner



Send chats to “all panelists”

The chat box will appear on the lower right corner

Thank you for attending this webinar!

Please don't forget to complete the evaluation that will pop up on your screen once you close WebEx.

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For more information, visit stdtac.org and cba.jsi.com.