

California Fire Chiefs Association
2013 Annual Conference



Horizon of Fire-Based EMS

Fire Chief Harry Beck

Mesa Fire and Medical Department

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Medical Director, Mesa Fire and Medical Department

Purpose



Enhanced Fire-Based EMS performance and efficiency under the Affordable Care Act



City of Mesa, Arizona



- 137 square miles
- 440,000 residents (2010)
- 85,000 winter visitors (2010)
- 75,000+ > 62 years of age
- Large Retirements
- Diverse Population



Mesa Fire and Medical Department



- 20 ALS engines
- 5 ALS ladders
- 4 Transitional Response Vehicles
- 19 fire stations
- 56,138 total calls
- 80 % EMS



2008 Orientation

- **Economic Recession**
- **Imminent Budget Reductions**
- **Expectation for Change**
- **Perception of “Traditionalism”**
- **Rising Call Volumes & Response Times**
- **More than ½ companies responding on
> 3,000 calls per year**
- **30% of initial responses utilize second
due company**



2008 S.W.O.T

- **Demand for Sustainable Change**
- **Structure Fires on Downward Trend**
- **Four Person Staffing Threatened**
- **Full ALS Response Capability**
- **Positive Community Relations**
- **Strong Labor-Management**



Transitional Response Vehicle (TRV)



- Staffed with an EMT Captain & ALS Firefighter
- Four Units - Peak Time Deployment Model
- Keep ALS Units available for high emergencies
- Low Acuity Injuries
- Improved Dispatch Triage



Physician Assistant TRV



- **ALS Captain & Nurse Practitioner**
- **Treat & Refer to Primary Care Physician**
- **Provide alternative destination**
- **Close (24 hr) follow-up**
- **CLIA waived laboratory tests**
- **Improved Service Levels**
- **Billing for Services**



Public-Private Partnership

Mountain Vista Medical Center



IASIS Healthcare

(One of the largest healthcare organizations in the US)

176 Beds

25 Bed Emergency Department

55,000 ED visits a year

**Level 3 Trauma, Stroke Center,
Cardiac Center**



Evolving Issues



- National Health Care Major Issue
 - Cost of Health Care - 17.9% GDP



- Impact of Affordable Care Act
 - Private EMS Begins to Lobby Congress



- Creation of Accountable Care Organizations
 - CMS Grant Opportunity



Cost



Human Resource



Equipment



Response Apparatus



Savings

(Averages Used)

Emergency Room

	Transport to ED	\$1,000
	Registration	\$525
	Physician Assess	\$325
+	Decision Making	\$950
Total		\$2,800

Includes above and additional
Typical Reimbursement is 50%

PA/TRV

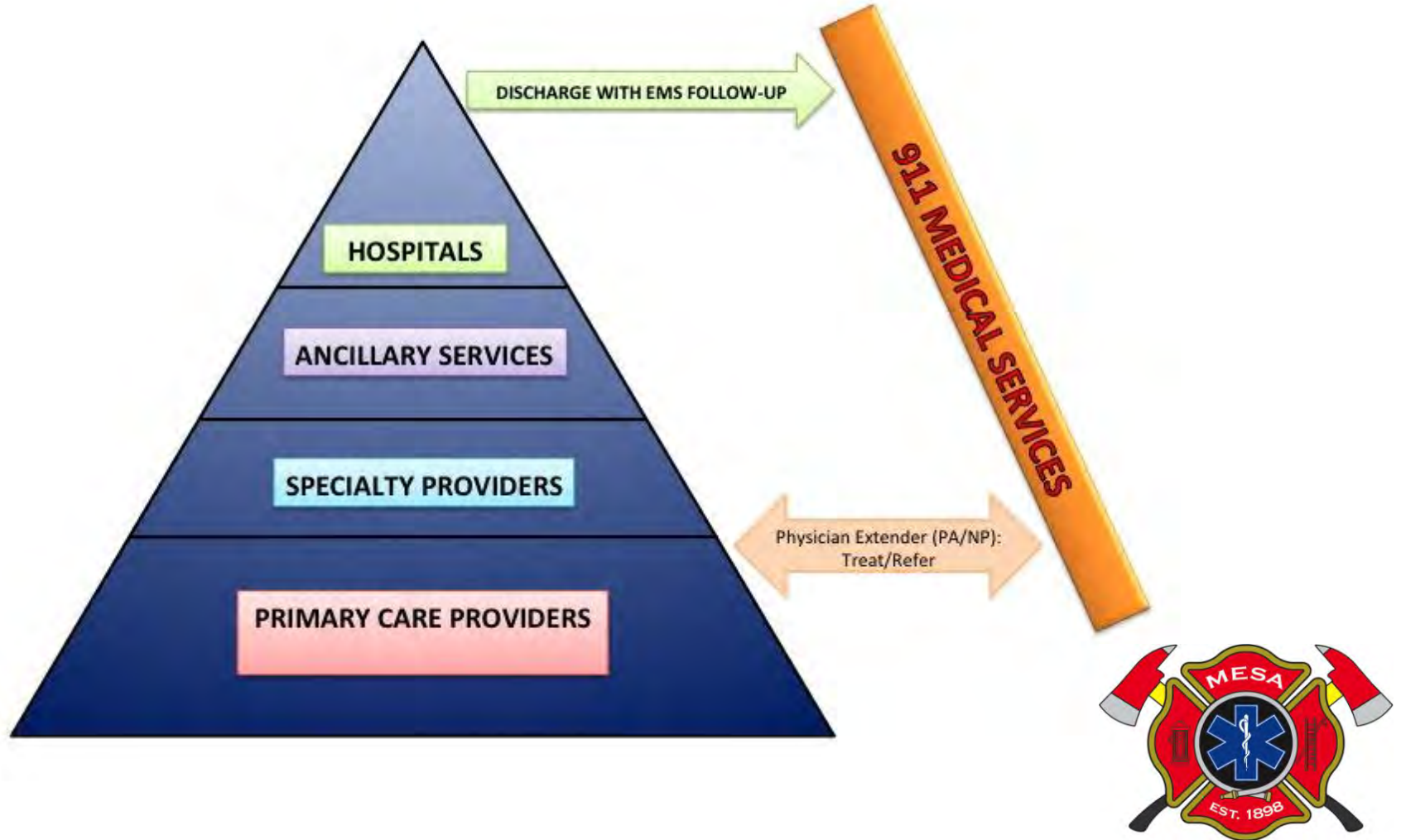
(treat & refer)

	Annual Personnel Cost	\$765,000
+	Vehicle/Equipment O&M	\$50,000
Sub-Total		\$815,000
Total		\$279.00

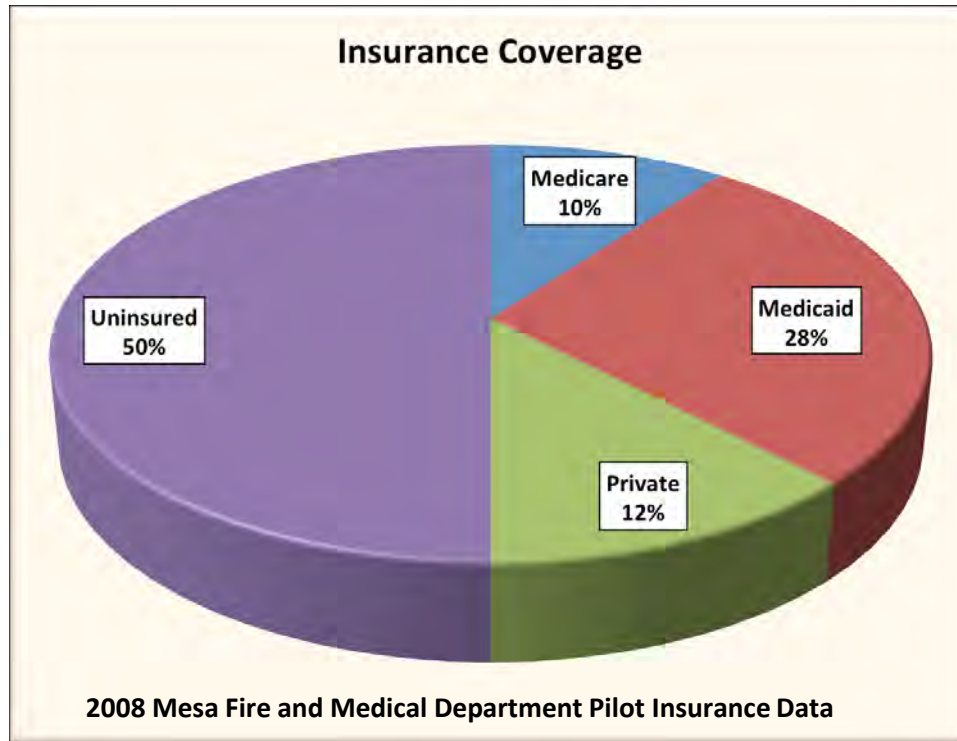
Total Yearly Costs at 3,000 calls/year
At 8 Calls/Day For 365 Days



Community Care Initiative Payment Model



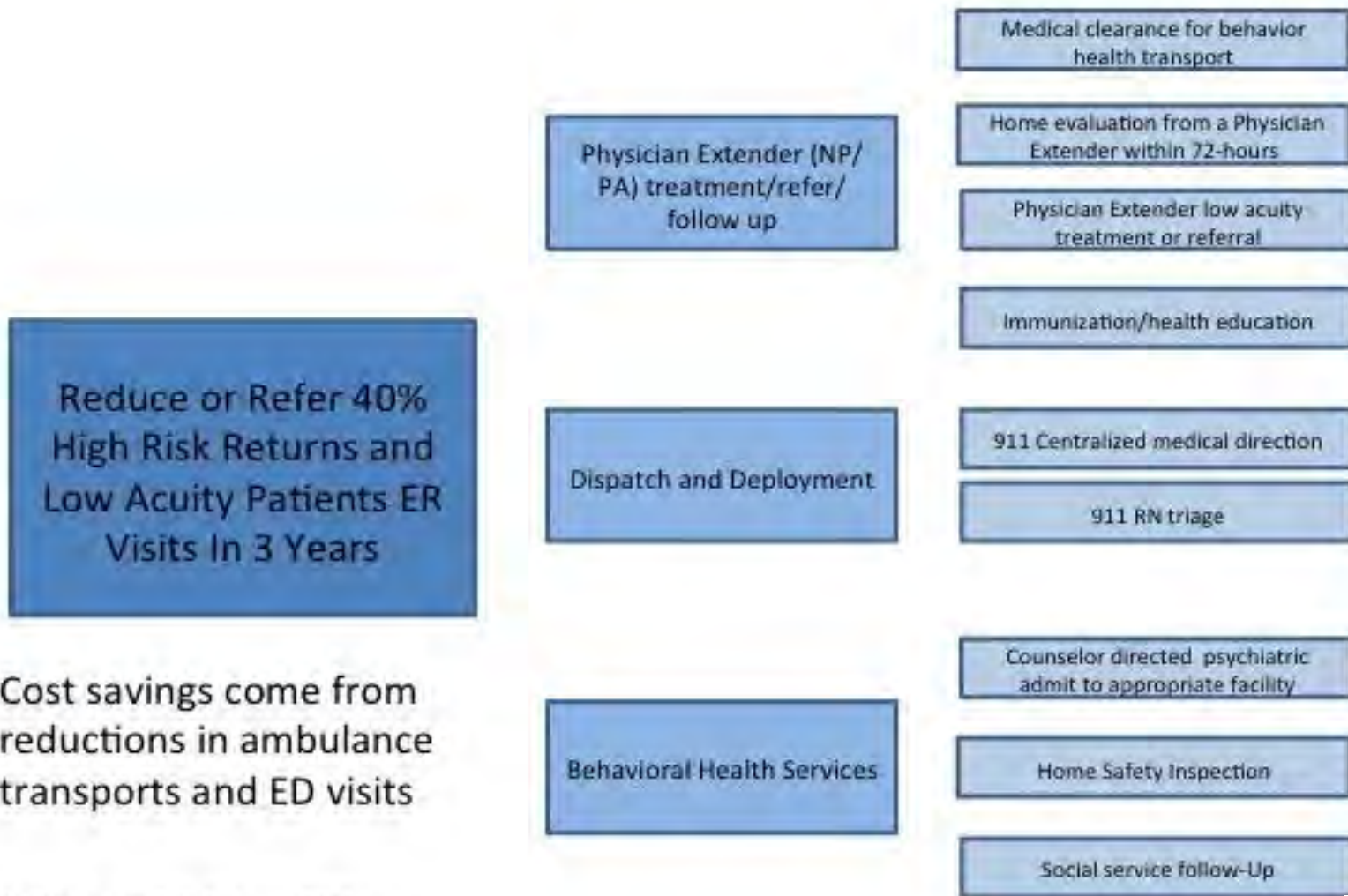
Insurance Coverage



Medicare	10%
Medicaid	28%
Private	12%
Uninsured	50%



Community Care Initiative: Aim and Drivers



Cost Comparison

Emergency Room Costs 2013

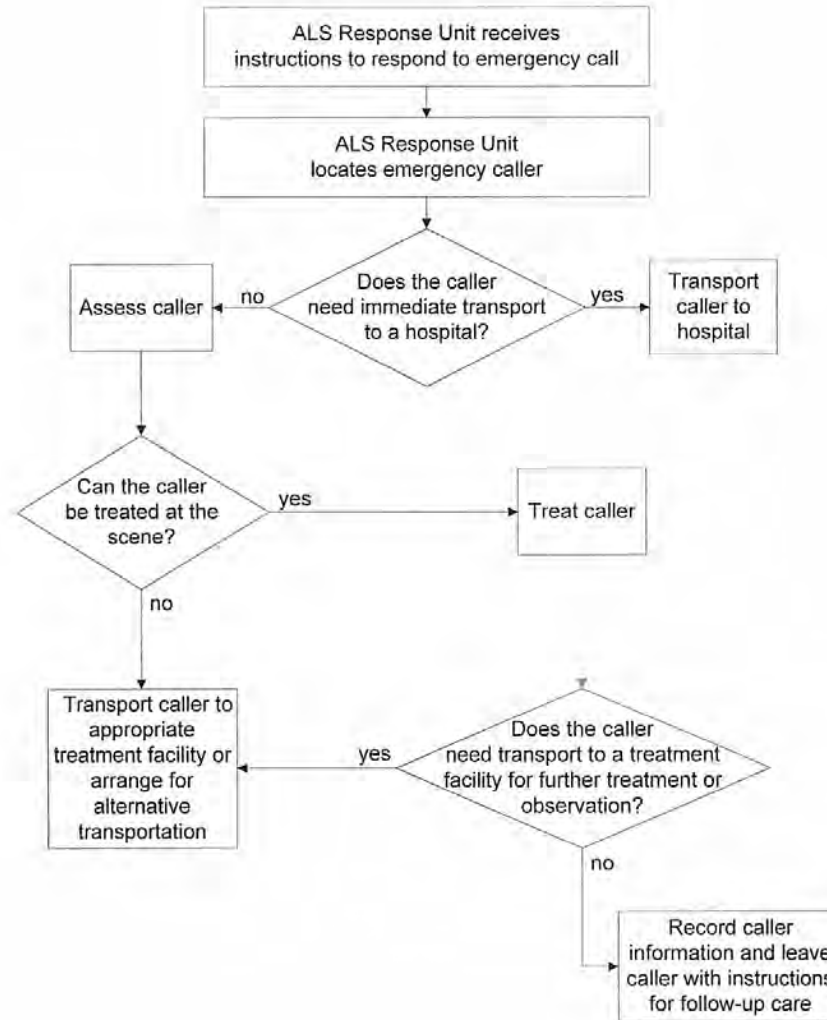
Diagnosis	Median charge (\$) (95% CI)	Mean charge (\$) (95% CI)	Inter-quartile range (IQR)	Minimum charge	Maximum Charge
Sprains & strains	1051 (982–1110)	1498 (1304–1692)	1018	4	24110
Other injury	1151 (1003–1281)	2103 (1770–2437)	1594	46	27238
Open wounds of extremities	979 (864–1090)	1650 (1341–1959)	924	29	25863
Normal pregnancy and/or delivery	1204 (1027–1384)	2008 (1701–2315)	2008	19	18320
Headache	1210 (1093–1344)	1727 (1510–1943)	1572	15	17797
Back problems	871 (741–984)	1476 (1265–1687)	1189	66	10403
Upper respiratory infection	740 (651–817)	1101 (891–1312)	827	19	17421
Kidney stone	3437 (2917–3877)	4247 (3642–4852)	3742	128	39408
Urinary tract infection	1312 (1025–1580)	2598 (1780–3416)	1975	50	73002
Intestinal infection	1354 (1114–1524)	2398 (1870–2927)	1960	29	29551
Total outpatient conditions	1233 (1199–1268)	2168 (2103–2233)	1957	3.5	73,002

Source: Kliff, S. An Average Emergency Department Visit Costs More Than an Average Month's Rent.
 The Washington Post. 2 March 2013
 UC San Francisco February 2013



Transport Flow Chart

FIG. 3



The Model Works



Air Date: January 2013, KSAZ-TV



Developmental Needs For PA/TRV



- Cost Recovery
- Shared Savings
- ACO Involvement
- 3/30 Follow-Ups
- Research Evidenced-Based
- Quality Assurance
- Expanded roles – Maximize Certifications & Licenses



Developmental Needs For PA/TRV



- Research - Evidenced Based Medicine
- Quality Assurance
- Expanded Roles – Maximize Certifications & Licenses



Behavioral Health TRV Study



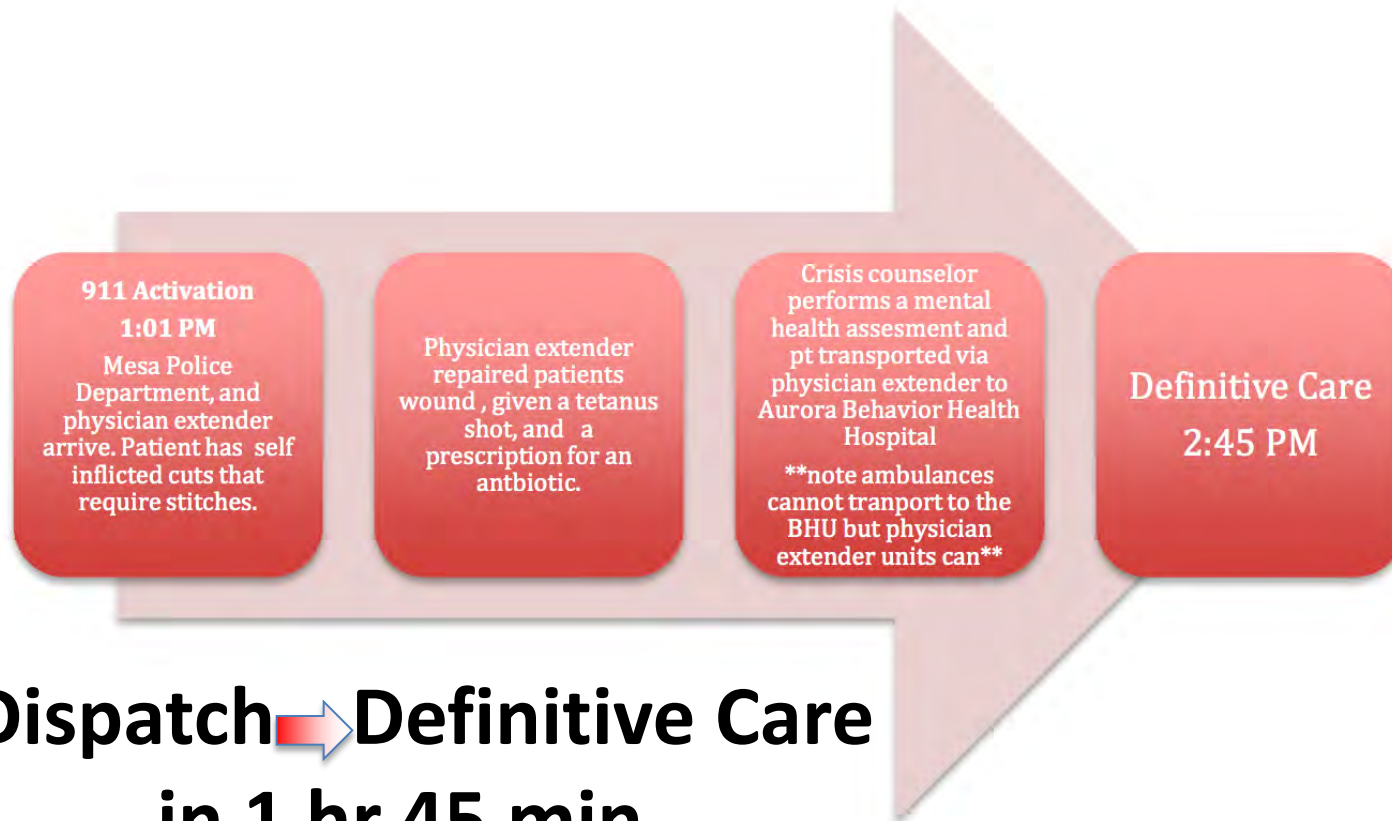
Crisis Preparation and Recovery, Inc.

" Helping People and Organizations Survive"

- **ALS Captain & Crisis Counselor**
- **Alternative Destination**
- **Peak Time Deployment**
- **Eliminates ED Costs**
- **Cost Recovery**
- **Supports Law Enforcement**



Behavioral Health



***Dispatch → Definitive Care
in 1 hr 45 min**



Horizon of Fire-Based EMS



- Expansion of the model
- Public-Private Partnerships
- Higher Education for Members
- Enhance public access/“Minute Clinics”
- Determine demographics



Horizon of Fire-Based EMS



- Public School Partnerships
- Communication Center
- Centralized Medical Direction
- On site medical direction
- Telemedicine
- Business/Special Events
- Integrate into health care systems





Not to replace the Primary Care Physician





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