OUTSOURCING MEDICAL EQUIPMENT SERVICES

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OUTSOURCING MEDICAL EQUIPMENT SERVICES

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OUTSOURCING MEDICAL EQUIPMENT SERVICES

1. CE Outsourcing Explained

* What?
* Who Sells?
* Why?

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1. CE Outsourcing Explained

CE Outsourcing Object ("what?")

Staff: employees of the outsourcing company but sometimes could be hospital employees or a mixture

Infrastructure (office, shop, utilities, communication, etc.): provided by the hospital

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1. CE Outsourcing Explained

CE Outsourcing Object ("what?")

Other Physical Resources: (tools, test & measurement equipment, benches, etc.): provided by the outsourcing company but sometimes could be a mixture

Financial Resources: provided by the hospital but managed by the outsourcing company

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1. CE Outsourcing Explained

CE Outsourcing Object ("what?")

Management (staff, finance, performance, etc.): responsibility of the outsourcing company

Training (for users and maintainers): responsibility of the manufacturer/distributor, outsourcing company provides user refresher training (rare)

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1. CE Outsourcing Explained

CE Outsourcing Object ("what?")

Documentation (manuals, policies & procedures, service records): manuals should be provided by manufacturers/distributors; outsourcing company provides policies and procedures and generate service records. The service records and inventory database must be transferred to the hospital when the outsourcing company leaves.

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1. CE Outsourcing Explained

CE Outsourcing Providers ("who sells?")

OEM Outsourcing (aka Multi-vendor Servicing)
* The outsourcing company is an OEM, which may provide a mixture of hospital-based staff and traveling staff ("field service")

* Examples: GE & Philips

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1. CE Outsourcing Explained

CE Outsourcing Providers ("who sells?")

Independent Service Organizations (ISO)

* The outsourcing company is independent of any OEM

* Examples: TRIMEDX, Crothall (Compass), Sodexo

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1. CE Outsourcing Explained

CE Outsourcing Providers ("who sells?")

Mix-Model

* The outsourcing company is an OEM that hires another company to share responsibilities

* Example: Siemens

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1. CE Outsourcing Explained

CE Outsourcing Providers ("who sells?")

Management Only:

* The outsourcing company deploys and manages hospital
   employees

* Examples: TRIMEDX, Sodexo

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1. CE Outsourcing Explained

CE Outsourcing Rationale ("why?")

Outsourcing is a good alternative to the traditional in-house supported by OEM and 3rd-party for these reasons:

Reduce

* costs
* equipment rental costs
* management oversight burden

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1. CE Outsourcing Explained

CE Outsourcing Rationale ("why?")

Outsourcing is a good alternative to the traditional in-house supported by OEM and 3rd-party for these reasons:

Insure against expense fluctuations (analogous to health insurance for persons)

Fills in gaps of internal expertise (recruitment & retention)

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1. CE Outsourcing Explained

CE Outsourcing Rationale ("why?")

Outsourcing is a good alternative to the traditional in-house supported by OEM and 3rd-party for these reasons:

Improve

      * quality

      * patient satisfaction

      * compliance with regulations and/or accreditation standards

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2. CE Outsourcing Management

EQUIPMENT CATEGORY	TIME COVERAGE	FINANCIAL COVERAGE	EXCLUSIONS (beyond abuse & force majeure)
Mission critical equipment (e.g., CT, MRI, surgical robot, lab auto-analyzer)	• Workday: 6:00-20:00 • Non-workday: 24 hours on call	• Full for 1, 2, 3 • Pass-through contracts for 4, 5, 6, etc.	• Flat panel detectors • Etc.
Non-mission critical imaging equipment	• Workday: 6:00-18:00 • Non-workday: on call 8:00-20:00	• Full for XXX • Labor only for YYY • Pass-through contracts for ZZZ	• Laser tubes • Ultrasound probes • Etc.

SLA Scope Example
(agreed negotiable items)

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2. CE Outsourcing Management

EQUIPMENT CATEGORY	TIME COVERAGE	FINANCIAL COVERAGE	EXCLUSIONS (beyond abuse & force majeure)
Non-mission critical biomedical equipment	• Workday: 6:00-18:00 • Non-workday: on call 8:00-20:00	• Full for XXX • Labor only for YYY • Pass-through contracts for ZZZ	• Parts for flexible endoscopes • Etc.
Non-mission critical laboratory equipment	• Workday: 6:00-18:00 • Non-workday: on call 8:00-20:00	• Full for XXX • Labor only for YYY • Pass-through contracts for ZZZ	• Calibration reagents • Etc.

SLA Scope Example
(agreed negotiable items)

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2. CE Outsourcing Management

KPI (Service Level)	KPI Goal	Incentive	Penalty
Equipment uptime for mission critical equipment	• 90% CT, MRI, CathLab • 85% SurgRobot, SurgLaser • 95% ChemAnalyzer		
Schedule maintenance (SM) completion rate	• 100% for critical equipment • 90% for non-critical equipment		

SLA KPI's

(Incentives and Penalties)

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2. CE Outsourcing Management

KPI (Service Level)	KPI Goal	Incentive	Penalty
Repair request response time	• ≤15 minutes for mission critical equipment • ≤60 minutes for non-mission critical equipment		
Repair completion time (resolution time)	• (depends on your local situation and availability of parts)		

SLA KPI's

(Incentives and Penalties)

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2. CE Outsourcing Management

KPI (Service Level)	KPI Goal	Incentive	Penalty
Repair request escalation time for mission critical equipment (with notification to client)	● (Depends on your local situation)		

SLA KPI's

(Incentives and Penalties)

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2. CE Outsourcing Management
Discussion

In-House Services

In-house is good model only if

* Can recruit and retain good staff

* has necessary resources *(budgets for parts & training)*

* has strong support from senior leadership
   (CE's have active role in HTM)

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2. CE Outsourcing Management
Discussion

Outsourcing

* Can be advantageous if properly selected and managed, especially for hospitals with limited resources and located far from metropolitan areas

* Adds competition to the existing service providers and, thus, lowering costs and enhancing quality

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2. CE Outsourcing Management
Discussion

Outsourcing

* Outsourcing companies may offer CE professionals a better career growth opportunity

* CE professionals may join the companies for better career growth opportunity

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2. CE Outsourcing Management
Discussion

Outsourcing

* Poorly managed outsourcing puts the hospital at risk of

* financial and operational loss,

* clinical staff and patient dissatisfaction,

* potential risk of loosing license or accreditation

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2. CE Outsourcing Management
Discussion

Outsourcing Pitfalls

* CE outsourcing can backfire if not carefully planned and managed because it can:

    * Increase costs ("extra charges")

    * Increase cost fluctuations (poor Supply Chain support)

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2. CE Outsourcing Management
Discussion

Outsourcing Pitfalls

* CE outsourcing can backfire if not carefully planned and managed because it can:

    * Decrease efficiency due to technically incompetent staff or those without customer-service skills

    * Add burden to management oversight

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2. CE Outsourcing Management
Discussion

Outsourcing Pitfalls

* CE outsourcing can backfire if not carefully planned and managed because it can:

* Decrease patient satisfaction (cancelled appointments due to excessive equipment downtime)

* Cause complaints from clinicians & patient incidents

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3. Comparison of Main Service Models

In-house

OEM Outsourcing

ISO Outsourcing

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3. Comparison of Main Service Models

CRITERIA	IN-HOUSE	OEM OUTSOURCE	ISO OUTSOURCE
Staff recruitment & retention	Limited career growth	Good career growth but lots of travel	Best career growth & limited travel
Staff competency	Uneven	Best for own products, uneven for others	Good if large (training investment)
Service documentation	Limited access	Best for own products, uneven for others	Uneven, good if large (bargaining power)
Replacement parts	Limited access	Best for own products, uneven for others	Uneven, good if large (bargaining power & 2nd source => economy of scale)

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3. Comparison of Main Service Models

CRITERIA	IN-HOUSE	OEM OUTSOURCE	ISO OUTSOURCE
Response time	Best	Best for products supported by on-site staff, others uneven	Best for products supported by on-site staff, others uneven
Effectiveness	Uneven, generally low	Best for own products, uneven for others	Good if large (training investment)
Rental equipment management	Not responsible	Seldom responsible	Can reduce substantially
Non-maintenance support ("extras")	Good but uneven	Mostly reluctant to help	Best if properly supported remotely

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4. Secrets of CE Outstanding Success

Service Provider's Perspective

Hospital's Perspective

Financial Win-Win

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4. Secrets of CE Outstanding Success

Service Provider's Perspective
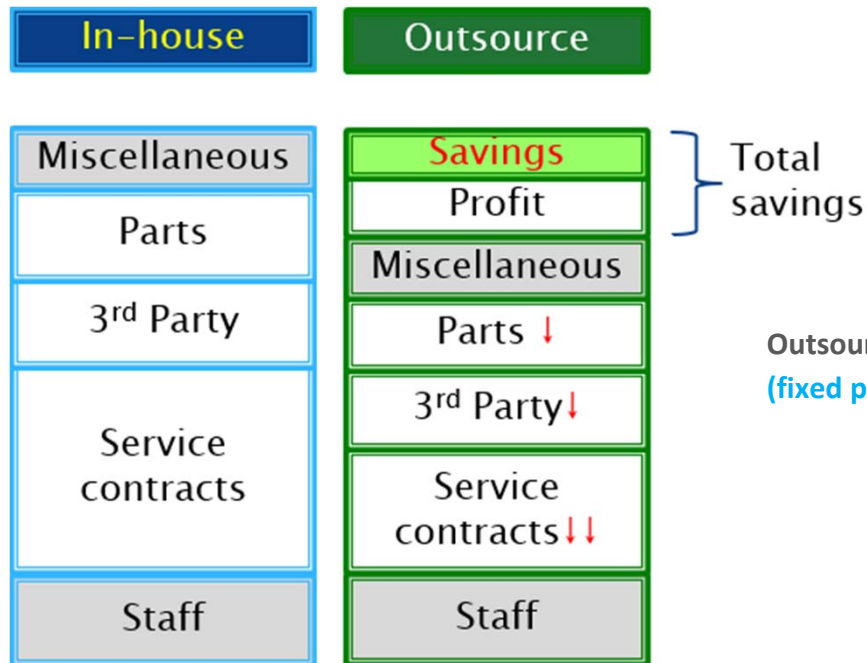
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4. Secrets of CE Outstanding Success

Partnership Attitude

Long-term Vision

Cultural Match

Stringent Multi-disciplinary Supervision

Focus on Outcomes

Win-Win not Lowest-cost

Bench-marking

Hospital's Perspective

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4. Secrets of CE Outstanding Success

Financial Win-Win

Outsourcing Profit = Total Savings – Hospital Savings
(fixed price example)

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Conclusion

* CE Outsourcing ≠ 3rd Party Service

* CE Outsourcing has its own niche: it can be very good under certain circumstances
  if well managed (use SLA)

* Poorly managed CE outsourcing can be costly and risky to patients and clinical
  professionals

*CE outsourcing can help to balance against OEM service by creating competition

Thank you! شكرا لكم

- Please contact us if you have any questions, comments and suggestions:

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