SUMMARY MEDICAL REPORT – Late Winnie Akinyi:

Name of Client: Winnie Akinyi

Date of Admission: 9/3/2012
Date of Delivery: 9/3/2012
Date of death: 9/3/2012

The Client was a 24year old female para 2+0; gravida 3, LMP 5/6/2011; EDD 12/3/2012; LDD was 2009. She attended ANC at MSK Kisumu Nursing home. Last reviewed on 16/2/2012 with false labour, U/S showed a gestation of 31 weeks, other systems NAD, observed over 24rs and discharged home.

Re-admitted on 9/3/2012 at 9am;
With h/o:

- lower abdominal pains,]
- severe pv bleeding] 2 hours onset

O/E: - fair g/c

- BP 99/73 mmHg, Pulse rate 90/min, Tem. 36.5^0C
- Per Abdomen – clinically FH term, strong contractions, longitudinal foetal lie with cephalic presentation, FHHR 120/min
- Inner clothes soaked with blood
- VE – she was actively bleeding; Speculum examination – bleeding from internal os.

Clinical Diagnosis: Severe APH 2^0 to ?Abruptio Placentae.

Plan: - blood grouping and cross-match 2 pints/units of blood; Check Hb

- U/S abdominal scan, prepare for emergency C/S
- Prepare for theatre; anaesthetic review; double-set up in theatre.
- Pre-op observations

Criteria	Component Context	Minimum Standard Recommendation	Actual Case: (The case of Winnie Akinyi)	References
1. Delivery Preparation	**Facility, ANC of client & Standards**	-ANC follow-up can also be done at level 1 thro' CBHIS -Static Facilities level 2-6	Attended ANC at Kisumu Mariestopes Nursing Home-level 2/3 uneventfully: -ANC education -equipments for ANC clinic -ANC client profiling.	Essential Obstetric Care manual, 2006. MSI Clinical Standards, 2009 WHO guidelines
	Medical Personnel	Trained service providers/cadres who could be doctors, nurses, clinicians, midwives, paramedic	-the late Winnie was attended to and managed by medical doctors (an MO, an Obstetrician/gynaecologist), Nurses, anaesthetist, care assistant	-Kenya National Norms & Standards. -MSI Clinical standards. -NHSSP II
	Emergencies & Medical Emergencies Management	Adherence to Principles , standard and practice of MEM	All principles of EP, standards & Practice of MEM were observed in	-Kenya National RH Instruction Manual for service Providers.

	Preparedness		Winnie's case (APH, Shock, PPH)	-MSI Clinical Standards 2009. -WHO guidelines on OBs Care.
	Infection Prevention	Standard principles of Infection Prevention	Observed all principles of Infection prevention through the preparation	MSI Clinical standards 2009
2. Pre-delivery Decisions, Education & Preparation	MEC/EOC criteria	Standard principles & procedures in with Medical/Obstetric Emergency Eligibility criteria: -Basic/Standard management of APH/PPH. -Basic/Standard management of Shock.	-A Para 2+0 at 35 weeks of pregnancy; severe vaginal bleeding with signs of haemorrhagic shock:	MSI Clinical Standards, 2009 Kenya National guidelines on EOC
	Informed Consent & Counselling	Counselling on undergoing a surgical procedure: -Client/or relative to voluntarily consent to the procedure. -C/S is a surgical procedure to remove a foetus from uterus. -Benefits/risks associated with the procedure plus minor and major complications.	-Husband and the patient was informed on basic principles of undergoing an emergency Caesarean surgical procedure. -Both Client and husband voluntarily consented to the explained emergency C/S procedure. -Husband voluntarily signed the informed consent form.	Kenya National RH Instruction Manual for SPs, 2006 MSI Clinical Standards, 2009 Client file notes, March 2012. Essential Obstetric Care for SPs in Kenya, 2006
	Delivery Procedure specific **Decisions & Preparations**	-Specific Client assessment/ evaluations -Personnel Skills & experience in C/S. -Operating Theatre -Anaesthesia, equipments and consumables -informed consent by client/relative.	-decision/consent to undergo Emergency c/s because life of mother & baby were already at high risk. -Pre-op preparation, observations and investigations were done for Winnie. -Skilled Doctors, Nurses, anaesthetist, paramedics were available &ready. -Theatre, anaesthesia & equipments with double setting ready.	Client file notes, March 2012. Incident Reports
3. Delivery Process & Procedure	**Emergency delivery through c/s**	C/S assisted delivery: Three (3) kinds practiced: -(i) classical c/s, (not	-The client was done Emergency C/S through a lower Segment Section-an incision horizontally across	MSI Clinical Standards, 2009 Kenya National Guidelines on

		(common, high risk of rupture) -(ii) lower segment c/s (commonly practiced, low risk of rupture) - (iii) An inverted-T section (done in difficult lies, risk of rupture high)	lower segment of uterus-commonly practiced & safe. -The c/s delivery process was uneventful.	EOC, 2006. Mother Care and Population, 2011, Client file Notes
	Further client **Evaluation in theatre** just before surgery	-Taking pre-op observations -any necessary and relevant investigation	-U/S abdominal scan: -IUFD at 35 wks gestation -heterogeneous low-lying placenta -Δx of IUFD with Placenta Previa made with probable Abruptio placenta. -Pre-op vital Signs: - BP-99/65; P-90/min; RR-24/min; Temp-35.2^{0}C	Client file notes
	Intra-op demand & Findings	-Continuous monitoring of vital signs -Intra-op support of client life under anaesthesia. -Record of intra-op observations	• Winnie was put under GA and C/S done. • Vital signs maintained through during the c/s. • Intra-op findings: -female FSB delivered -Abruptio placenta found -retro-placental clots found -estimated blood loss (clots 200mls + 100mls fresh) • 3 litres I.V fluids given during c/s procedure. • Uneventful operation, lasted approx. 2 hours	Client file Notes Incident Reports
4. Post-Op Activities & Procedures	**Post-op Observations**	Observe post-op in line with standard care protocols & instructions	Reversed well from GA; orientated in TSP. Winnie's Post-op vital signs were essentially within normal range; client talked with staff & relatives.	Client file Notes & Records: Anaesthetist's notes. Doctors operation notes
	After procedure Instructions.	In Bleeding states, observe: BP, Pulse: ½ hrly for 2hrs then hourly for next 4 hrs. (See References)	Winnie's observations: ¼ hrly observation of vital signs for 2 hrs, then ½ hrly and 1 hrly of vital signs. Blood transfusion of 2 units of whole blood. Input-output fluid-chart monitoring. Analgesics twice and three times for one day. Antibiotic cover for 4 days	-Doctors' & anaesthetist's post-op notes. -MSI Clinical Standards 2009 -National EOC guidelines 2008. -Primary Mother Care and Population 2011, Acrodille Edition.
	Post-op Reviews and follow-up	Immediate & Regular client expert reviews for any of the following is highly recommended:	Between 1pm and 6.00pm post operatively, The client, Winnie, was reviewed by: - Doctor	See reference materials: – client notes, reports

		• Bleeding from abdominal or uterine wounds. • Non-functional ileum bowels. • Infection of wound or uterus or chest. • Urine Retention.	- Anaesthetist - Clinical Service Manger (CSM).	enclosed.
5.Complications	**Principles of Best Practice & Factors that reduce Maternal deaths**	Reduce major complications to minimum rates. Properly manage the complications if it occur. Published <u>factors that reduce maternal deaths</u>: - Skilled providers - Antibiotics/other drugs - Safe C/Section - Blood transfusion - Better Anaesthesia	The late Winnie was given the best available medical and professional attention and management at MSK Kisumu Nursing Home. throughout the time period: - attended by doctors (MO & an Obstetrician/Gyn.), nurses, anaesthetists etc. - operating theatre and anaesthesia - had safe/successful c/section - Received blood transfusion - Received relevant drugs including antibiotics.	Clinical standards and protocols Recorded client management documentations
	Associated Bleeding as a complication	APH or PPH can be sudden, severe and obvious; are commonly due to: -placenta abruptio -uterine rupture -Uterine atony	Winnie was confirmed to have:- -Severe APH 2^{o} to placenta previa with Abruption (found at surgery). -PPH 2^{o} to posterior 3cm uterine tear (found at post-mortem)	Client Operation Notes
	Death-a major Complication	Five (5) leading <u>maternal killer complications</u> are: (1) Bleeding (APH/PPH)-25%; PPH being commonest single cause! (2) Unsafe Abortion-20% (3) Infections-15% (4) Eclampsia-12% (5) Obstructed labour	Winnie had complicated Bleeding both before and after the Operation. **Note:** **(25%** of maternal deaths are associated with Bleeding) (In 2012, major complication rate related to deliveries across MSK maternity homes is 0.5% - 0.8%)	Primary Mother Care & Population, 2011 Examination, operation, client records & incident reports
	Associated complications from C/S as a Procedure per se!	The risk of death if a mother undergo C/S is 0.5% - 3% in developing world	No complication associated with the C/s process of the Winnie's operation. -This implies that Winnie had approximately 15 times risk (chance) of dying from Bleeding complications than from C/S per se	Client file Notes especially post-op Operation notes
	Diagnosis &	Prompt	-The primary doctor and	Client File Notes

	Management	management	team made likely diagnosis -Immediately ordered & documented the correct plan -Conducted un eventful C/S surgery process. -Team provided appropriate post-op instructions -Close and appropriate observation, monitoring and follow-up, 7 hrs later, enabled the team detect changes in Winnie's condition. -Immediately called for help, and initiated appropriate resuscitation measures. -Winnie transferred to theatre immediately unfortunately collapsed approximately 9 hrs after the surgery.	Kenya National RH Instruction manual for SPs, 2006 MSI Clinical Standards, 2009 Essential Obstetric Care for SPs in Kenya, 2006
6. Prevailing Situation	**Workload versus Strike by Public health workers in GoK facilities**		The MSK team managed to provide good standard care to Winnie among other 30 inpatients admitted in this facility. During this period, GoK health workers were on strike and hence the MSK team on duty were overstretched also successfully doing another C/S after Winnie & caring for other 3 clients on their 1st post-operative day.	
	Intra-uterine foetal death (IUFD) in the case of the late Winnie. Female Fresh still Birth (FSB).		It is known and documented that foetal case fatality rate in-utero in cases of severe abruptio placenta is almost always 100% with minimal chances of foetal survival. In Winnie's case, abruption placenta with fresh still birth confirmed during Caeserian section.	
	Highest Standard of care and Best practices		Based on the expected and recommended standard practice of management (provided through international, national and organisational policies and guidelines) the team exhibited highest and best standard of care practice available with no element of incompetence or negligence during care process to Winnie.	
Conclusion:	The likely cause of Winnie's death: Cardio-pulmonary arrest as a result of severe haemorrhage before reaching hospital (Abruptio placenta/uterine tear).			

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Prepared By:

Dr. Mark Ayallo,
Public Health (S&RH)
Director of Clinical Services & Operations.

Confirmed By:

Dr. Fred Akonde,
Obstetrician & Gynaecologist,
Obstetrics Clinical Supervisor.